Greetings--

In case you're wondering why this letter isn't signed by Tom Straw, it's because Tom is nearing the end of a well-deserved sabbatical leave at Los Alamos National Laboratory in New Mexico. Although he spends a lot of time e-mailing various faculty and students here, I believe he is having a productive change-of-pace before returning to the chair position at the beginning of winter semester.

As a newcomer to this job, I can assure you that life as an administrator is not as bad as most faculty would tell you—it's much worse. Part of my reason for saying this is that the Department has been going through some major changes that culminated just as I began my term as Interim Chair. One important event was the transfer into the Geology Department of the Institute for Water Sciences, which was formerly under the direction of the Vice President for Research. While we in the Department were thrilled to become more closely tied to the Institute, the funding for IWS is not sufficient to allow it to function at its past levels of staffing and activity. Among those who joined the Department were Bill Sauck, Dannette Shaw, the Manager of the Water Quality Lab; and Lauren Hughes, the Community Facilitator of the GEM (Groundwater Education in Michigan) Program. Other personnel changes associated with this transition were that Joyce Parsons has moved to a full-time position as one of our departmental secretaries, and Sue Nap has been hired as a half-time secretary to work primarily in the GEM center.

One development that I know will be of interest to all alumni is the announcement by Dr. John Grace that he will retire at the end of the summer 1996 term. John's sense of humor and collegial spirit have helped us to maintain just a little sanity around here over the years and he will be sorely missed by all of us. As all of you know, his rapport with and concern for students in the department, particularly the undergraduates, will be impossible to replace.

A landmark event of a different type for the Department was realized this year with the graduation of our first PhD student in hydrogeology. The recipient of this degree was Cole Lovett, who did some really significant work relating to well-head protection in a glacial-drift aquifer. Several of the other PhD students are making good progress and should be finished soon.

This fall, ground was broken for the new science pavilion on campus, which includes the renovation of Wood Hall and the construction of a new research building which will occupy the space between the west end of Wood Hall and Rood Hall. Geology will be moving into offices and classrooms in Wood Hall by Fall, 1997 and have significant laboratory research space in the new building, which is scheduled for completion by Fall, 1998. I hope you will all be able to visit campus once this magnificent new facility is finished.

The Department is conducting two faculty searches this year, one for a geochemist and one for a geophysicist. In the administrative jargon around here, these searches are referred to as "hunting licenses," which means that we can advertise and interview, but not necessarily hire someone because there are more hunting licenses than money to fill the positions. To hire, we must find an outstanding candidate. Keep your fingers crossed for us and we'll let you know next time what happened.

My own research activities are increasingly focused in Cass and St. Joseph Counties. In Cass County, we are continuing to investigate the ground-water flow system and water quality in a small agricultural watershed. To date, one PhD student and four master's students have done theses in this area. We are currently in the first year of a U.S.G.S.-funded project in St. Joe County that is part of the STATEMAP program. Tom Straw and I, along with several graduate students, hope to map the surface and subsurface glacial geology of the county over a three-year period.

I will close with the hope that this newsletter finds you in good health and good spirits. We're always happy to hear from you or see you on campus. Have a great holiday season.

Best wishes,

Alan E. Kehew
Professor and Interim Chair
ESTELLA ATEKWANA
ASSISTANT PROFESSOR

This has been a very busy and productive year for me. Together with other geophysics faculty (Bill Smith and Bill Sauck) and with Richie Laton's help, we have recently developed a geophysical targeting center (Geophysical Test Site). The advantages of having such a site here at WMU have far reaching implications. This is probably one of four sites that exist in the nation, with Stanford University being the only other University with a test site. The purpose of this targeting center is to provide students with a field laboratory where hands-on practical experience could be gained in the acquisition, processing, and interpretation of geophysical data. We used this center successfully this summer for our Field Geophysics Course and Hydrogeology Field Course. Additionally, having a test site here at Western will bring manufacturers to campus who want to test the performance of the instruments being developed. By so doing, students will be exposed to state-of-the-art equipment and cutting edge technology. This will also allow the faculty to have access to state-of-the-art equipment for cutting edge research.

Persistence does in fact pay off. We finally got our equipment grant funded ($85,782.00) after four years of nagging NSF. The proposal, entitled "Implementing an Environmental Geophysics Field Course," was a combined effort of the Geophysics faculty (Estella Alekwan, W.A. Smith, W.A. Sauck, and C. Schmidt). Orders have been placed for a 24-channel engineering seismograph, a cesium vapor magnetometer, an R2 sycal resistivity unit with induced polarization capabilities and an EM-31. We hope to have this state-of-the-art equipment by the end of December, 1995.

On the research front, two of my papers were accepted for publication and include, "Precambrian basement beneath the central midcontinent United States as interpreted from potential field imagery," to be published in Geological Society of America Special Paper and "Wetland Vegetation colonization and expansion in small impoundments in Yaounde, Cameroon, West Africa," (co-authored with Eliot) to be published in Wetlands Journal.

I attended the GSA annual meeting in Seattle, Washington, where I presented a paper on "Proterozoic Evolution of the East Continent Rift Basin: Constraints from potential field methods." I also attended the Symposium on the Application of Geophysics to Environmental and Engineering Problems (SAGEEP) in Orlando, Florida, sponsored by the Environmental and Engineering Geophysical Society.

On the home front, Kyra is now a preschooler and Kyle is finally in kindergarten. He loves the bus ride to school in the mornings and gets quite upset when we miss the bus, which we seem to be missing quite often. Eliot is still working on his dissertation. He tells me he hopes to defend in April.

RONALD B. CHASE
PROFESSOR

As the years go by, my life does not seem to change. I do not teach different courses, I do not significantly alter my research goals, I do not ease up on the students, and I certainly do not grow any older. One heartening change is an increase in the number of traditional Geology majors, in spite of the fact that the Hydrogeology Program and its student population remains strong.

My research program is several-fold. Firstly, I continue to be interested in Precambrian rocks in the cores of Laramide basement-cored uplifts and am working on ideas regarding lithologic and fabric controls (with extensive help from Tim Clarey). Secondly, I am interested in isotopic signatures of granitic plutons in the Idaho-Montana thrust corridor. I am attempting, along with Pat Bickford at Syracuse University, to identify decapitated and thrusted Cretaceous plutons based on their lead, strontium, and neodymium isotope ratios relative to the ratios of their presumed source zones. Thirdly, my ongoing study of bluff stability along the Lake Michigan shoreline awaits funding. Bill Montgomery has recently adopted this study as his Ph.D. Dissertation and is currently doing great work.

My personal life could not be better. I continue to maintain good health, a loving wife (with great patience), and four boys who continue on their career tracks. Chris (wife) teaches Adult Education courses in the Comstock Public School system, in addition to managing the home and a rather spaced-out husband. Karl (#1 son) continues to pursue his Hydrogeology degree here at Western while working as a private disc jockey for Powermix, Inc. Andy (#2 son) graduated from Northwestern University a year ago and is currently employed in Seattle as a systems analyst for the East Asian Branch of McCaw Industries (the AT&T cellular phone company). Scott (#3 son) is currently a senior Pre-Med student and football jock at Washington University (St. Louis) and is madly applying for medical school. Jamie (#4 son) is a junior at Wesleyan University (Conn.) with dual majors in East Asian Studies and Political Science. He spent last summer as a government intern in Washington, D.C., and is currently studying as an exchange student in Osaka, Japan. All is well with the Chase clan. I hope all is well with you also. Please contact me by E-mail (chaser@wmich.edu) if you have time.
JOHN GRACE  
PROFESSOR

Last year was a sabbatical year for me, and I chose to return to Argonne National Laboratory in Chicago and spend a year in a pleasant respite from the usual regime of teaching, advising, and committee meetings. My work centered on studies of microscopic reactions of fluids on mineral surfaces utilizing infrared, Raman and synchrotron radiation spectroscopies. It was a joy to get to play with a lot of fancy equipment.

I'm now back in the old routine and planning ahead to complete my final year of teaching. I've decided to retire at the end of this year after 27 years of teaching. I will surely miss the "good times" and the many students that passed this way. I hope to keep in contact with everyone and plan to stick around doing odd-jobs on emeritus status; so if you want to reach me, just send an e-mail or a letter to the department. All the best!

DUANE HAMPTON  
ASSOCIATE PROFESSOR

This has been a normal year for me. I am teaching hydrogeology and groundwater modeling this semester, and learning in the process. That is perhaps the greatest side benefit of teaching. I am mourning the demise of a preproposal to the Department of Energy authored with Dave Wronkiewicz of Argonne National Lab. It passed the first cut, but died in the second. The Dean continues to give us bad news about the Institute for Water Sciences. We faculty have not authored enough successful grant proposals, and the administration has lost interest.

The hydrogeology job market in Michigan experienced a significant downturn when MUSTFA funding died. I believe that our graduates will continue to find jobs, both in and out of state, for people skilled in both theoretical and practical, hands-on hydrogeology. Nevertheless, the faculty agree that we do not need to offer undergraduate degrees in both hydrogeology and field hydrogeology. When this change has been approved up the chain, we will no longer accept new students in the field hydrogeology major. Our field course continues to grow—we added a module on remediation this summer. A local alumnus, Jeff Hawkins of Envirologic Technologies, is trying to help us continue to offer the high-quality field course we have achieved these last several years thanks to Richie Laton. Hopefully, we will find a way to do this that meets the requirements of our administration. Estella Atekwana and Bill Sauck are planning to create a multi-week (3 or 4) field course in environmental geophysics in the spring. We think our students will continue to enjoy an "edge" in hydrogeological training.

R.V. KRISHNAMURTHY  
ASSOCIATE PROFESSOR

Our Ph.D. program is four years old and doing well. Cole Lovett was our first graduate this summer, despite working full time. Good job! Presumably, Tim Clarey will finish in the next few months, and Al Hascall, Eliot Atekwana, and Richie Laton should finish in a year.

My research program continues to focus on free product problems and modeling. I am looking for support to measure free product velocity in a contaminated aquifer using tracers we developed at Western. I would also like to begin laboratory studies of improving the design of trenches used to recovery free product. It's a little early to say for sure, but it looks like Johnson Filtration will begin commercially offering well screens prepacked with hydrophobic sand packs. My field data shows substantial performance advantages are enjoyed by monitoring and recovery wells packed with hydrophobic media. Several students have worked on contaminant transport modeling studies which I hope to combine in a paper on the practical validity of transport models such as MT-3D. I am working with a Senior Fulbright Scholar from Latvia, Ilona Valante, who is spending the year at WMU. She is interested in observing the results of biodegradation of hydrocarbons in soils.
FACULTY NEWS (CONT.)

Funded by the NSF, I undertook a trip to India to investigate possible collaborative research under the Indo-US bilateral agreement. The scientific aspects have been worked out already and we are awaiting some changes likely to take place at Washington and New Delhi which will suggest new format for this type of joint effort.

I also participated in a meeting of the midwest regional panel of the Department of Energy, stationed at Indiana University. This meeting included scientists from major universities of the midwest and was convened to recommend to the DOE what the research priorities of the midwest center should be. This meeting also helped me to come into contact with some well-known researchers from the top universities of the midwest.

There was a faint silver lining on the otherwise murky funding horizon when the NSF awarded about $9000 to support a graduate student through summer and to ensure that the stable isotope lab does not go on a life supporting system!

G.E.M. REGIONAL CENTER

As of July 1, 1995, the G.E.M. Regional Center became an official member of the Geology Department. As a community outreach center within the Institute for Water Sciences, we were part of the transfer of I.W.S. to Geology. It was not a long leap for us. The G.E.M. Center was initiated and built through the extensive efforts of Dick Passero who served as its director for the first three-year funding period and as co-director with Dave Dickason of the W.M.U. Geography Department for the second three-year funding period. Dick officially retired as co-director at the end of 1994 but has continued to serve as a consultant to G.E.M. Dave Dickason remains the Director of the G.E.M. Center and has worked extensively to attach land use issues to groundwater protection. You may well be asking “What is G.E.M.?”. The G.E.M. logo stands for “Groundwater Education in Michigan”. The W.K. Kellogg Foundation created G.E.M. almost 7 years ago. Issues important to Michigan (including public health and local leadership) have interested the Foundation for a long time. G.E.M. combines these interests in a single program. Its goal then was to inform students, citizens, business leaders, officials, and legislators of groundwater’s importance to the people and economy of Michigan. Since that time, G.E.M. has focused increasingly on the reason for raising people’s awareness—protecting groundwater from pollution.

The activities of the Center employ the expertise of the faculty and the students of the Geology and Geography Departments and I.W.S. The Center conducts applied research in hydrogeology and in land use analysis for local communities. The results of these studies are brought to members of local government through educational workshops and written reports. The G.E.M. Center provides ongoing support to these communities by identifying additional interested stakeholders. This process aids local government, members of the private sector, and the general public in understanding their water resources and the effects of their behavior on these resources. In addition, the G.E.M. Center is very active in developing educational materials for use in primary and secondary education, and for the general public. The Center also serves as a resource for water education throughout the State of Michigan and the country.

The G.E.M. Regional Center is open to the public Monday through Friday 8:00 am to 5:00 pm. The Center employs Lauren Hughes as a full-time associate director and G.I.S. Specialist Greg Anderson (W.M.U. G.I.S. Research Center) for one day a week. Numerous consultants provide their expertise for our research and outreach efforts as our projects and workshops require.

AWARDS AND SCHOLARSHIPS

Undergraduate
American Mineralogical Society Undergraduate Award - Kevin Kahmark
Kalamazoo Geological & Mineral Society Summer Field Trip Scholarship - Artik Kirkpatrick, Cindia Skinner
National Association for Black Geologists & Geophysicists - Candace Clot
Presidential Scholar in Geology - Kevin Kahmark
Senior Honor Award - Earth Science-Jeremy Start; Geology-Mike Foley; Hydrogeology-Robin DeWyre
Lloyd J. Schmidt Museum Award - Stephen Chris Whisner
Lloyd and Marilyn Schmaltz Award - Briget Doyle

Graduate
American Federation of Mineralogical Societies Scholarship Foundation - Lisa Anderson, Caroline LoVetere
Graduate College Student Research Grant - Lisa Anderson, Brent Dayharp, Norman Lovan, Machav Machavaram, William Montgomery, Hans Neve
National Association for Black Geologists & Geophysicists - Eliot Atekwana, Jarrell Barnett
W. David Kuenzi Award - William Lozier, Matthias Malin
Rusli Adam is employed as a geologist at Esso Production Malasia, Inc. Lynn Aldrich is still in Houston, Texas, raising her family and being active in local recycling efforts. David Baldner is a math, science, and Bible teacher in Milford, MI, where he also enjoys coaching. Ken Bergenhagen visited the department. He is still working on his master's degree in Oregon. Jenny Bergin paid a recent visit to the department. She is working for an environmental engineering firm in the Plymouth area. Dean Blauser is division manager at Young's Environmental Cleanup, Inc. in Grand Rapids, MI, and specializes in hazardous materials training and remediation.

Lynn Diane Broede is a member of Who's Who Worldwide, Platinium Edition, Who's Who Environmental Registry, and the World Who's Who of Women 1994/95. She is employed by Geraghty and Miller, Inc., Chicago, IL. James Bohn is an earth science/oceanography teacher in Brockton Massachusetts. His professional interests include earth science teaching and watershed pollution/estuaries. Leonard Call has recently married. Randy Chorny is a CGS Data Intensity/Technical Document coordinator at Prince Corporation in Holland, MI. Casper Cronk has made one of his more-of-less annual visits to Kalamazoo and it's always a pleasure to see him. Casper still lives in London and does geophysical consulting and auger playing in various irreplaceable Irish bands. Rumor has it that Darcy Davenport is now married and is living in California with her family.

J Deopsomer is now working at the Montana Bureau of Mines as a research assistant. His work involves traveling all over Montana getting swl of hundreds of monitoring wells. The Bureau also sets up continuous data loggers that run on solar panels. He sets up the loggers and downloads the swl off the data logger at the well using a laptop computer. Also in Houston is Chris Dick who works for G.X. Technologies. Scott Green is a senior hydrogeologist for Conestoga-Rovers & Associates in Illinois. His professional interests include low-temperature aqueous geochemistry applied to movement of contaminants in aquifers and aquifer protection/restoration. He and his family visited the department and his eldest daughter (6 years old at the time) thought the geology museum was "so cool."

Thomas Kaugher (Moore) is a Senior Project Geologist for PM Environmental, Inc., in Troy, MI. He has been working on in-situ remediation systems for both soil and groundwater. Roger Kennett is employed at Arizona DEQ focussing on mine waste issues in conjunction with the Western Governors' Association.

Rich Kimmel and Bob Tolliver attended WMU's alumni reception at the GSA meeting this November. Rich is working for St. John's Water Management District in Florida, and Bob is earning his PhD at the University of Tennessee and is planning on getting married soon.

Dawn Kirkbride is curator of education and natural science at Kingman Museum of Natural History in Battle Creek, MI, and a part-time instructor at Kellogg Community College. Mike Klisch is a hydrogeologist with Golder Associates in Redmond, WA. His professional interests include municipal water supply, mining hydrogeology, hydrogeochemistry, aquifer testing and analysis.

In June, 1995, Martha Klein moved to Philadelphia for a position with CH2M HILL, as a wetland scientist/hydrogeologist. Since then she's worked principally on a 10,000-acre coastal wetland restoration project for a major utility company at sites in southern New Jersey and Delaware. She's delighted to be spending less time in gas stations and more time in the mud.

Bill Landover is also still in Houston working for an independent geophysical consultant. Derek Marranca is a Field Engineer at Bauman-Krueger Contractors where he constructs, operates, and supervises remediation systems. Dan Marvin is the MIS Director at Imperial Oil Company and teaches Programming I and II at Mid-Michigan Community College as a para-professional.

We hear indirectly that Larry Massotti is now in Rochester, Minnesota, and head of their planetarium program. J. Philip McLaren is teaching oceanography, marine biology and ecology and earth science at Eastern Nazarene College in Quincy, MA. He was recently appointed to the Education Advisory Committee of the New England Aquarium.

Randall Millstein is an instructor at Oregon State University, where he recently completed his PhD, and a free lance science and technical writer for Salem Press. His professional interests include impact geology, extinction processes (pathologic), geologic paradigms, science ethics and stratigraphy.

Thomas Rice teaches Robotics/Automation, Computer Repair and Environmental Geology at the Oakland Technical Center. He and his wife enjoy running occasional fossil-hunting field trips for geology classes at Dinosaur Hill Nature Center in Rochester, MI.

Stephen Schmitt married Julianne Burkherdt of Wisconsin. Steve is working for Fox Environmental Services of Wauwatosa, Wisconsin.

Professional interests of John Shamo, president of Hopper Exploration Inc., and senior hydrogeologist for Hinderliter Environmental Services, Inc., include oil/gas exploration and development in Illinois, environmental site assessments in all phases of remediation throughout Indiana, Illinois, and Kentucky, and installing and monitoring air sparge-soil vapor extraction systems.

Rick Shroeder visited the department recently. Rick is working in Cambodia helping to install village water systems. Arthur Simpson is pastor of Congerville Mennonite Church in Congerville, IL. Julie Stein is professor and acting chair of the department of anthropology at the University of Washington. She is also still curator of archeology at their museum.

Jean Talanda is a Senior Hydrogeologist for KIESER & ASSOCIATES in Kalamazoo, MI, who specialize in surface water and groundwater problems.

Sara Verbrugge-Pearson is a hydrogeologist with Superior Environmental in Marne, MI. She explores innovative and inexpensive methods for hydrocarbon remediation and also explores ways to make environmental clean up profitable and economical for business and industry.
DEPARTMENT OF GEOLOGY NEWSLETTER

GEOLOGY DEVELOPMENT AND SCHOLARSHIP DONATIONS

Your generous contributions to the Department support a wide array of activities and we appreciate your help. We try to thank each donor, but as with all bureaucracies we do miss someone occasionally. If we missed you, please know that we rely on your support and will continue to make every effort to acknowledge your gifts. Please accept our sincere thanks for your generous support.


Matching Gifts - Consolidated Natural Gas Co., Exxon Education Foundation, Kellogg Corporation Citizenship Fund, Shell Oil Company Foundation, Union Oil Company of California Foundation, Union Texas Petroleum, The Upjohn Company Foundation

THANK YOU FOR YOUR DONATIONS

During the past year we have been able to accomplish many things because of your generosity. We have hosted several speakers, helped pay the way of undergraduate and graduate student researchers to conferences, purchased maps, photos, and small equipment to support student and faculty research, and a wide array of additional items. Although we have been enjoying unprecedented support by the University administration, our program and needs are simply developing faster than they can follow adequately. Your help is sincerely appreciated.

We hope that you will consider making a contribution to the Geology Community. You may do this by sending a check payable to: WMU Foundation - Department of Geology.

You may specify that your donation go to the Department of Geology Development Fund, the W. David Kuenzi Scholarship Fund, the Core Lab, the Earth Science Fund, or the Department's Museum. The Development Fund is used to support a wide array of activities, including undergraduate scholarships, student travel, supplemental support for equipment purchases, student activities and a variety of projects for improvement of teaching and research in the Department. The Kuenzi Fund is used to support graduate student research with emphasis on students studying sedimentology.

NEW ALUMNI

The following people received their degrees from WMU's Geology Department between December 1994 and August 1995. Congratulations!

Bachelor Degree Recipients
Field Hydrogeology - Michael Friedman, Dawn Hohner, Terry Lorraine, Sarah McVay, Michael Stoneberg, Brenda Taylor, Brent Taylor
Geology - Amy Birkhold, Robb Cookman, Michael Foley, Jean Gigliaro, Kevin Kahmark, Michael Marton, Jason Ollila, Stephen Whisner, Holly Wiers
Geophysics - Ahmad Mizam Abd Kidir
Hydrogeology - Jose Bermejo, Robyn DeWyre, Bryan Hill, Jose Marin, Steven Knapp, Christopher Shope, Omar Tarzi

Master Degree Recipients
Earth Science - Thomas Dewhirst, Jeffrey Hawkins, Lauren Hughes, Steven Kimm, Nancy Knight, Beno Thomas, Prasad Velagatly, Troy Weaver
Geology - Patrick Bartnick, Jennifer Bergin, Vincent Buening, Kim Finkbeiner, Anton Gallas, Chris Miller, Linda Nicks, Darrell Potter, David Seng
Doctoral Degree Recipients
Geology - Cole Lovett
DEPARTMENT OF GEOLOGY NEWSLETTER

MAILING LIST

We are anxious to keep your current address on our mailing list and, therefore, ask for your cooperation in advising us if you move. Also, if you know of other alumni who do not receive this newsletter, please send their names and addresses; we would like to add them to our file.

Name

Major Degree Year

Address & Phone

Current Employment

Professional Interests

News Items

Return to: W. Thomas Straw, Department of Geology, Western Michigan University, Kalamazoo, MI 49008. Phone (616) 387-5485. Fax (616) 387-5513