

Alumni News from the IUP Geoscience Department

GEO-TIDINGS

Number 3

Spring 1999

Editors: John F. Taylor '75 & Karen Rose Cercone

A GREAT 30th ANNIVERSARY CELEBRATION!

The Geoscience Department marked its 30th Anniversary last October with a two-day gathering of alumni, staff and students over IUP's Homecoming Weekend. The event was a great success, bringing together alumni, faculty and current students in a celebration of Geoscience at IUP. As part of the festivities, the Geoscience Club held a rock and mineral sale to raise money for field trips and conferences, with terrific specimens donated at cost by *Treasures of the Earth* in Johnstown. Our special 30th anniversary t-shirts sold out early on Friday afternoon, as geoscience alumni toured the new labs in Weyandt Hall and stopped in to chat with members of the department. Some of our grads, like Peter Weilersbacher, dropped by just for the afternoon; others like Chuck Bove came all the way from San Francisco and spent the entire weekend at IUP. Other alumni attendees included Dorothy Merritts, Russ McConnell, Mark Yanoski, Tom Metarko, Chuck Peterman, Dale Skoff, Barb and Brian Dunst, Brian Roth, Dennis Donati, Ralph Feather, Carla and Dave Brezinski, Tom Moore, Jon Pima, Michelle Bosko Gajewski, Paul Hale, Bob Pilat and Susie Shaffer Smith. Current and retired faculty included Walt Granata, Connie Sutton, Fred Park, John Taylor, Karen Rose Cercone, Steve Hovan, Lynn Marquez and Tom Lierman.

On Friday evening, nearly 40 alumni and staff gathered at the Rustic Lodge to meet new and old friends, and to hear Assistant Chair Connie J. Sutton discuss the Geoscience Department's history and goals for the future. Joan Fisher, IUP's Vice-President for Institutional Advancement, stopped by to help inaugurate our two new special-purpose Geoscience Funds: the Paul Prince Fund for Oceanographic Research and the Walt Granata Fund for Geologic Research. These special funds for support of student research have already generated several significant contributions from generous alumni.

The Geoscience Anniversary weekend concluded with a field-trip-style Sunday Brunch at Yellow Creek State Park. This event came complete with camp dogs Kirby and Cinnamon to eat the scraps, and chilly weather courtesy of John 'The Rainmaker' Taylor. Despite the gray clouds, however, a fire and hot coffee kept everyone warm enough to eat their donuts, pancakes, cinnamon apples, scrambled eggs with cheese ala Fred Park and bacon. A wonderful time was had by all. Individual geology class re-unions may continue this homecoming tradition in the future. Look inside this issue for more details as well as a brand new Geo-Tidings feature...pictures!

GEOSCIENCE STAFF UPDATES

FRED PARK

It's official! After helping to found the Geoscience Department and teaching in it for over thirty years, Frederick Park has retired as of December 1998. While we already miss Fred, we know he'll be stopping in to say hello, work with the students...and maybe eventually even clean out his office! In the meantime, IUP alums Mark Yanosky and Tom Metarko are helping to fill the teaching gap until the department can hire a permanent replacement for Professor Park. You know you've made an impact when it takes two good men to replace you....

APRIL BALDWIN

We knew it would be very hard to replace Paula Martini, our long-time department secretary. But after a month of searching, we found April Baldwin in the College of Business and convinced her to come to work for us. (We think it was our collection of postcards from alumni around the world that proved we were a nice bunch of people to work with!) April has done a terrific job taking over the office, getting our files straightened out and learning how to spell various geologic terms. She's from Apollo PA and has one son, Kevin (12). She says to keep sending those postcards - she likes getting them even if she doesn't always know who they're from!

NEWS FROM THE EDITOR:

We were so pleased with the response to the 30th Anniversary Celebration that we've decided to make the Friday night of Homecoming Weekend an annual Geoscience Department Alumni Banquet. Mark your calendars now for October 8, 1999! We encourage alumni from appropriate years to think about attending along with contemporaries from the same and nearby class years. This fall will mark the:

30 th anniversary of the Class of '69	25 th anniversary for the Class of '74
20 th anniversary for the Class of '79	15 th anniversary for the Class of '84
10th anniversary for the Class of '89	5th anniversary for the class of '94

If we can get small clusters of geoscience contemporaries to attend the Fall Banquet as a special occasion, we'll be glad to organize the party on our end! Anyone interested in attending should email John Taylor or drop a line to Karen Rose Cercone by mail. And don't forget our Spring Geoscience Banquet. It's always a great place to see faculty and network with other IUP alumni.

And if you like GeoTidings as much as you say you do.....

.....please consider donating \$10-20 per year to the Geoscience Fund to defray the expenses of printing and mailing it out to you!

FACULTY RESEARCH CORNER

DEEP-SEA RESEARCH BY STEVE

HOVAN

Terrigenous minerals are input to the pelagic ocean floor by a complex set of signals that relate to both sources and modes of transport. Each source and transport mode provides rare clues to the relative magnitude and variability of Earth's climate. Much of this type of research, however, has been plagued by our inability to distinguish mineral material transported by one mode from another and thus our studies have been restricted to areas of the ocean where we assume one type of transport process dominates. Recent work using detailed grain size and geochemical characteristics of pelagic terrigenous sediment shows that a clear distinction can now be made between various modes of transport. With this ability to distinguish transport modes, many new opportunities to study paleoclimatic and atmospheric changes are possible in areas where combined river, wind, and/or ice-rafted inputs occur. This proposal is designed to examine spatial and temporal records of terrigenous deposition in the abyssal Atlantic Ocean. It has two main objectives: 1) to identify the geographic realm of recent (post-glacial) transport for hemipelagic, ice-rafted, and eolian material in the Atlantic Ocean and 2) to examine the down-core temporal variations at a site dominated by eolian transport downwind from the Sahara-Sahel Desert. Using a combination of geochemical and physical characterization, we should be able to clearly discern climatic signals related to continental aridity and atmospheric circulation intensity throughout the late Pleistocene.

OCEAN CRUST RESEARCH BY LYNN MARQUEZ

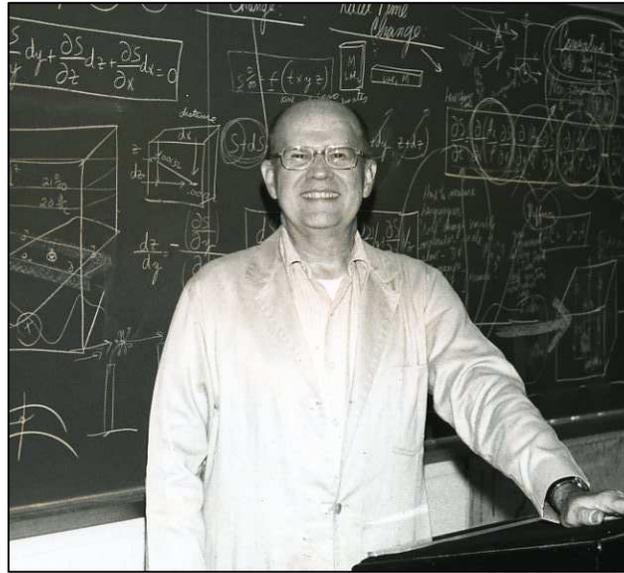
My primary research attempts to unravel the complex and inter-related processes of hydrothermal fluid flow and structural deformation in oceanic fault zones. We have long recognized that hydrothermal fluids flow to depth in the ocean crust, react with seafloor basalt, and egress to the seafloor through hydrothermal conduits. We do not understand the mechanism by which hydrothermal fluids flow through fault zones or how they affect or are effected by deformation within fault zones.

Through detailed mapping in the Troodos ophiolite, Cyprus, I identified several oceanic faults that act as hydrothermal fluid conduits. These faults and fault zones were mapped on a scale of less than 1:50 to delineate distinctive meter to centimeter scale alteration and deformation features. I then analyze these samples using a variety of techniques including: transmitted and reflected light petrographic, fluid inclusion petrography, wavelength dispersive spectrometry, and oxygen isotopes. The detailed analyses of both the microstructural characteristics and the hydrothermal characteristics of fault conduit samples provide a greater understanding of these complicated inter-related processes. Results from my Ph.D. work show that hydrothermal fluids flow through fault zones in multiple discrete events. Several generations of deformation and hydrothermal minerals occur within single fault samples. This deformation and hydrothermal history most likely results from variable fluid pressure gradients resulting from temporary hydrothermal seals in fault conduits.

SOME WORDS ABOUT PAUL A. PRINCE

by John Dembosky, B.S.Ed. '93

“You should be able to turn it on and off like a switch” is one thing I’ll never forget Professor Paul A. Prince telling me in regards to a spirited and disciplinary teaching mode that all teachers need to have and control. No matter how he personally feels on any particular day, a teacher must always be a mood conducive to learning as soon as he steps into a classroom. Those were words spoken to me one sunny day I met



Mr. Prince along the steps to the parking lot beside the HUB. I have shared those words many times with other, novice instructors looking for some words of wisdom about teaching.

Paul Prince had a knack for high intensity instruction, likely from his years of experience at rigorous schools such as MIT. One always needed to be in class in time, or better yet, ahead of time, to assure that the copious notes that would solidly fill the chalkboard before one arrived could be hastily scrawled into a notebook. A few brief moments were all one had as soon as Mr. Prince began his lecture to get those notes (that had an unbelievably short half-life) before they were replaced with yet more diagrams, sketches, partial derivatives and the like. I’d never taken notes like those of Mr. Prince before, not after his meteorology and oceanography classes, but I’ve referred to them several times since!

The fake dramatic act, a Paul A. Prince specialty, was always a great way to keep his students’ attention. The actor and the teacher weren’t exactly separable with Mr. Prince. There is nothing like flying erasers,

gravitationally challenged mega-textbooks, and boisterous outbursts to say ‘wake up people’ in a subtle way! Demanding a good work ethic from and having high expectations for his students was a trait that many will never forget about Mr. Prince. His willingness to sacrifice a bit of “popularity” at times for these qualities earned him the respect of all his students for

pushing them to do their best and expecting nothing less. After all, he always said his students weren’t in high school any more.

Though I don’t think he was ever a Boy Scout, Paul A. Prince took “Be Prepared” to its highest level. His back store room was a gold mine of tools, accessories, and other dangerous-looking stuff, that made a janitorial or handyman’s closet look like a lady’s jewel box. What couldn’t that man fix?! Also, an insistence for having a fully stocked first aid kit (or two) on any trip was appreciated on many occasions.

Dedication for any project, particularly his seismometer and seismograph, as well as his department, made Paul A. Prince someone any faculty or student loved to work with. Though appearing tough in the classroom, nothing could hide the kind and comical nature of this man whose presence will be missed for a long time.

PS—I finally figured out what “tetra-head-dread-on” and a “bat-tree” were. The noses of little dogs everywhere are now safe from static electricity!

Note

Professor Paul A. Prince passed away on July 26, 1998. He is survived by wife Jane Prince, now living in New Jersey. Donations in his memory can be sent to the Paul Prince Fund for Oceanographic Research at the Foundation for IUP.

ALUMNI NOTES

Alex Boughamer '98

I'm out of the igneous end of things and back into soft rocks for my graduate research, which is quite a relief. I'm not exactly sure what I will be doing, but I'll be working on Devonian sedimentary rocks in southeast Idaho. Unfortunately, I won't be able to get up into the mountains until June because of the snow! I'm also taking a scuba course so when I go back to the Bahamas I can stay down much longer and go much deeper.

Bill Clark '73

I just received the second issue of Geo-Tidings and really enjoy hearing about what is going on at IUP. The Granata and Prince funds are a great idea. I have kept in touch with Walt and Dottie over the years, as well as their son Glenn. Doc G must be really honored. After a 1.5 year stint in Scotland and 5 years in Houston, I am finally back in Colorado. For just over a year, I have been lead geophysicist for GeoQuest (Schlumberger) and have been working on oil and gas projects in Mexico, China, Indonesia and the US. You also may not know that I finished my Ph.D. at The University of Colorado at Boulder in 1994. It was finished while moving around and working full-time, but was worth it.

Barry Franz '76

I tried to juggle my schedule to attend the 30th Anniversary but I was giving expert witness testimony in a case in Missouri and my deposition was Thursday and Friday. (I just love attorneys.) My son Patrick also ran his first varsity cross-country meet that Saturday and he is only a freshman!! (Think you can tell how proud I am.) You had better take some photos and get them posted on a web site for those of us not able to attend. Tell all those bums I miss them and the "GOOD OLDE DAYS"!!! (you know -- when geology was rocks and fun, and not a profession.)

Michelle Bosko Gajewski '74

Here are a few things that I remember about our Geoscience group: We started the Annual Geoscience Banquet's back in 1974 (Linda Stark & myself). Linda always wore those "wild" earrings. I'll never forget Joe Petrone's grand entrance into the planetarium for our graduation wearing his large angel wings! Those Geoscience Club beer parties and Dr. Hall wrestling with the guys & dancing with the girls! I'm glad that I was part of all that. What great memories!

Keith Howell '96

I have currently accepted a position in Qatar (better known as the Monte Carlo of the Middle East) as a Formation Evaluation While Drilling Engineer with Sperry Sun Drilling Services. That's just a big name for someone who sits and watches a computer as sensors near the drill bit send up data to let one know what direction they are drilling and what type of formations they are drilling through. These sensors come in real handy when you're drilling through a high-pressure shale. And no, I have not had to abandon any rigs for gas kicks or fires, only for Tropical Storms in the Gulf of Mexico. I enjoy conversing with geologists from around the world and traveling to strange and exotic places, but being stuck on an offshore drilling rig for any length of time has its drawbacks. Let's just hope while I'm traveling around the Middle East everything stays calm and no tossing rockets back and forth at each other. It's great to read from everyone and what they are up to and how well they are doing, especially the guys and gals I attended classes with. I look forward to the next issue of Geo-Tidings, and Happy Birthday, Geoscience Department!

Pat Imbrogno '78

I'm living in Coraopolis with my wife Denise and children Kyle (15), Kara (10) and Kayla (10). I'm presently managing the LAN/WAN network for the Pittsburgh Region at Cabot Oil & Gas. In my spare time, I do exploration for oil and gas in the northern Appalachian Basin, the Michigan Basin and (in any other spare time) the Illinois Basin. Has anyone given Dr. Taylor a boost lately?

Philip Lacey '74

My family and I have moved back from Maryland where I have lived after graduating from IUP in 1974. I taught earth science in Montgomery County. For the spring semester of 1998, I taught earth science as a long-term substitute in the Neshannock Schools just north of New Castle. I am still looking for a full-time position for the fall. For the past five years I have been an active member of the Maury Project, part of the American Meteorological Society, for which I conduct hands-on physical oceanography workshops for teachers. Perhaps I will be able to share some of the modules in the near future.

ALUMNI NOTES

Jeff Miller '92

Thanks a bunch for the latest Geo-Tidings. It was really nice to hear how well the Department is doing and that everyone is alive, well and busy! As for me, I can't believe it's been 5 years since I moved out west. It has been a truly rewarding experience. After completing my MS in Hazardous Waste Management (emphasis in Geology) at Idaho State in Pocatello, Idaho, I moved to Salt Lake City. Then Cheyenne (skied with Keith Rittle!), then Denver, now back to Utah. I'll move anywhere as long as the mountains are close. I have a 'permanent' residence in Littleton CO as my office is based out of Denver. I am currently working for URS Greiner/Woodward Clyde, one of the larger design/engineering firms in the industry. Our office does a lot of design/engineering, oversight and project management for the US Air Force 'facility restoration program' at various bases across the west. The Air Force is very keen on innovative technologies, so I've had a chance to work on some really neat projects, such as surfactant flood aquifer remediation, passive groundwater treatment barriers and an 'evapotranspiration' landfill cover. I am also happy to say that the great majority of my work continues to be outdoors and that I still don't own a tie! On a more personal level, I am still single (happily) and have no children. My biggest hobby is hiking and I have recently caught the travel bug in a major way. I spent the winter holidays this year hiking in New Zealand and can't wait to go back. My girlfriend and I are planning a trip through Central America this fall (I need to contact Marty Arford about his Costa Rica trip!)

David Neely '98

I am here at the Desert Research Institute, University of Nevada at Reno, working on a database for my advisor. It's a pretty amazing place. There's all types of studies going on with supporting facilities and staff that boggle my mind (but my mind is easily boggled). I am still looking for a focus for my Master's thesis, but I am slowly getting nearer and nearer to determining what that might be. It will probably encompass some stratigraphic analysis, isotopic dating, fluvial and depositional environments, paleo populations, palynology, basin evolution (you'd be surprised by the amount of basins and ranges out here), possibly packrat middens, and maybe a good recipe for Coquille St. Jacques (if I can work that in without anybody noticing).

Gary Neuder '82

Got the letter about the Department Anniversary bash. I opened it Sunday, 4 October. Hope it went off well! Any surprise visitors? Life here is in the science mode since oil prices are down. This is the best place to hide in these lean times. Should we merge with someone, our position in Nigeria protects us from any layoffs. I do miss drilling wells though. We'll hide out here until sometime in 2000 or even later if there isn't anything more exciting around the world. My regards to all in the department. Next summer I've got a 30th high school reunion in Johnstown so I'll be dropping by to see ya'll.

Melanie (Altmore) Saxton '86

I have given up the hard-hat and clipboard of the construction sites to stay home and raise our two daughters, Brenna (6) and Justine (3). My husband Darrell is an engineer for Boeing, working on the 747's. I'm glad to finally get a newsletter...keep them coming!

Ryan Sherry '97

Currently, I'm employed with Woodward-Clyde, a geotechnical and environmental engineering consulting firm in Blue Bell PA. I'm a staff geologist and am involved with a variety of hydrogeologic and environmental projects.

David Stake '75

I just received a copy of the Geo-Tidings-- good job-- it brings back memories of IUP. I'm currently an Elementary Principal (retired earth & space science teacher!!) at North Clarion County School District. Along with my spouse Kay (IUP '74), I have two children: Kristen (17) & Bryan(15).

Wendy (Metcalf) Straatman '92

I'll be starting classes in August at Oklahoma State University while I still work for Phillips Petroleum Company. I'm working toward an MBA, attending classes at Phillips on interactive TV. The professors are on the OSU campus and the class is here! We can ask questions just the same, it's just through the TV. I couldn't pass up this opportunity. My daughter, Kate, has just turned two. I think she has more energy than even Karen Rose! My husband Warren and I always seem to be one step behind her in her adventures. My job is still great. There is always something to learn about geology.

ALUMNI SPOT-LIGHT

In each newsletter, we highlight alumni who have provided outstanding support to the department over the past six months. This time, we thank:

John Reynolds '71 for the major gift of funding which helped us start the Walt Granata Fund. Both the Geoscience department and Dr. Granata deeply appreciate John's generosity!

Tom Moore '76 for his significant contribution to the Walt Granata Fund. Tom's donation was matched two for one by Phillips Petroleum, making it three times as effective! Tom wrote the IUP Foundation that: "Walt Granata, as professor and department chair at the IUP Geoscience Department during both that department's formative years and my tenure at IUP made a significant impact on both the University and my personal life. He helped make me what I am today—a successful petroleum geologist. This is but a small 'thank you' to Walt, the Geoscience Department and Indiana University of Pennsylvania." Thank you, Tom, for honoring Dr. Granata and IUP with your gift!

Keith Rittle '90 for his generous donation of funds earmarked specifically for purchasing new departmental vans. In making his contribution, Keith noted that he really enjoyed the field trips he was able to take as an IUP student. We're glad he had such fond memories of them!

The Geoscience Roll of Honor

The following alumni, staff and friends have contributed to the Geoscience Fund over the past two years. Is your name on the list? Would you like to see it there? Just use our convenient donation form below to send in your contributions to any of our departmental funds. And thanks to all our benefactors, past and present!

**Charles Bove
Catherine Brier
Karen Rose Cercone
John Dembosky
Dennis Donati
Jennifer Dovin
Theresa Elicker
Ron Garney
Steve Hovan**

**James Knapik
James Loch
Barbara Ann Lynch
Teresa McConnell
Mike McNulty
Tom Moore
Imogene Moyer
Gary Neuder
John C. Reynolds**

**Darlene Richardson
Keith Rittle
Wendy Straatmann
Connie J. Sutton
Robert N. Swift
John Taylor
Charles F. Weber
James Yoder
Stephen Zbur**

***** FUNDING ALERT *** FUNDING ALERT **** FUNDING ALERT*****

The department's vans all have over 80,000 miles on them. In order to continue running our summer field courses, we need to purchase new vans on a ten-year payoff plan, matching our departmental equipment funds with money from the IUP Geoscience Fund. If you enjoyed going on field trips at IUP, please help us keep our field program going!

***** FUNDING ALERT *** FUNDING ALERT **** FUNDING ALERT*****

Geoscience Alumni Update Form

Name: _____ Email: _____
Phone: _____ Web URL: _____
Address: _____ Spouse: _____
_____ Children: _____
Position: _____ Employer: _____
Permission to Publish Your Address & Email in an Alumni Directory: ___ Yes ___ No
Your news for our next newsletter:

Please fill out and send back to the Geoscience Department, 115 Walsh Hall, Indiana University of Pennsylvania, Indiana PA 15701-1052. Or email your news updates to jftaylor@grove.iup.edu.

IUP Geoscience Fund Donation Form

To help you direct your donation to the correct account in the IUP Foundation, please cut off and attach this form. Make your check out to the Foundation for IUP, and put the appropriate account number on the memo line of the check. Remember, gifts to the Foundation for IUP are tax-deductible! If you've already sent in a gift, we thank you and welcome any additional support you can give.

I would like to donate to:	The following amount(s)
? The Walt Granata Fund for Geologic Research (# 361)	_____
? The Paul Prince Fund for Oceanographic Research (# 362)	_____
? The IUP Geoscience Fund for departmental support (#4530)	_____
? Unrestricted funds for IUP, for general university support	_____

Charge my donation to ? VISA ? MASTERCARD Acct # _____ Exp
date: _____
Name as it appears on the card: _____

Mail to: The Office of Annual Giving, 313 Sutton Hall, 1011 South Drive, IUP, Indiana PA 15705-1041.

30th Anniversary T-Shirt Order Form

If you missed the 30th Anniversary Banquet, don't despair! You can still have your very own 30th Anniversary T-Shirt! Just send in this order form along with a check for \$12 (includes \$2 shipping and handling cost). All profits from T-shirt sales support the IUP Geoscience Club's activities, such as attending conferences, running optional field trips and subsidizing student attendance at the spring banquet. All shirts are ash gray with maroon printing.

DEADLINE FOR PLACING ORDERS IS MARCH 1!

(Please allow 6-8 weeks after you send in your order for t-shirt printing and mailing.)

NAME: _____	small: _____
ADDRESS: _____	medium: _____
_____	large: _____
PHONE: _____	X-large: _____
EMAIL: _____ (in case of questions)	XX-large: _____

Cost: \$12.00 per shirt. Make check payable to IUP Geoscience Club.

Spring 1999 IUP Geoscience Seminar Series

If you live in the Tri-State area or are planning a trip back to IUP this semester, you might want to mark these dates on your calendar:

- January 29: **Dr Fred Marton** (Carnegie Institute) The Effects of Mineralogy on the Velocities of Subducting Slabs. Talk held at 4 pm in 104 Walsh.
- February 26: **Dr. Tom Anderson** (Univ. of Pittsburgh) MegaShear Zones in New Mexico. Talk held at 4 pm in 104 Walsh.
- March 26: **Dr. Richard Murray** (Boston University) Assessing Marine-Terrestrial Links—the ODP Record of Panamanian Uplift, Caribbean Tectonics and Andean Orogeny. Talk held at 4 pm in room 32 Weyandt.

April 30: 25th Annual Geoscience Day. Talks from 9 am to 3 pm, 134 Weyandt

- Inaki Aguirrezabal Potential Lead contamination problems on the IUP campus
- Terry Kish Pennsylvania Seismicity: Natural or Induced?
- Larry Kubli Contribution of fly ash from mine-mouth power plants to sedimentation in Indiana County
- Scott McCallum Timing of regression at the top of the Stonehenge Formation based on trilobite stratigraphy
- Ken Nozka Phase I evaluation of a metal-recycling plant in New Jersey
- Ryan Sharrer The origin of the earth-moon system: a review
- Matt Stebbins Hydrologic study of an illegal landfill site near Gypsy, PA
- Mark Zellman New remediation techniques for leaking gas tanks: a case study from Turtle Creek, PA

Distinguished Alumni Guest Speaker:

John Harper (Pennsylvania Geological Survey; B.S. in Geology IUP, '68)
Evolution of the Three Rivers During the Last Ice Age.

GEOSCIENCE DEPARTMENT

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