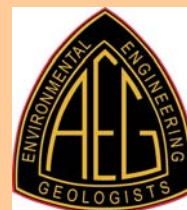




GEONews



Newsletter of the Association of Engineering and Environmental Geologists and
American Institute of Professional Geologists, Carolinas Sections

Spring 2006

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MARK YOUR CALENDAR!

MAY 5, 2006

**KATRINA – GEOLOGIC,
DISASTER, AND PERSONAL
PERSPECTIVES**

**DARREL SCHMITZ, PHD, PG
PRESIDENT, AEG**

*Calendar of upcoming events is on our
website - <http://www.AEGCarolinas.org>*

Issue date 21 March 2006

Meet the PRESIDENT (of AEG, that is!) KATRINA – GEOLOGIC, DISASTER, AND PERSONAL PERSPECTIVES

Darrel W. Schmitz, Ph.D., P.G., President, Association of Environmental and Engineering Geologists, Professor of Geology & Head, Department of Geosciences, Mississippi State University, will be coming to Raleigh on May 5, 2006 to offer his perspectives on the mother of all recent hurricanes.

Dr. Schmitz will provide a short “state of the Association” and a little information on the AEG Foundation before the talk, and welcomes new AEG members, AEG Sponsors, and students to ask about the upcoming AEG Programs. Katrina was “born” on August 24 as the twelfth storm of the 2005 Atlantic hurricane season. After raking southern Florida she became an extraordinarily large category 5 (Safer-Simpson scale) storm, covering about half of the Gulf of Mexico.

Katrina made a second landfall, the first in the northern Gulf, as a category 4 at Burris, Louisiana. She then made an additional landfall near the Louisiana-Mississippi state line. The large size and prior strength, coupled with the geography of the shoreline, resulted in a record high storm surge. The storm surge affected coastal areas from Louisiana to Florida while spawning tornadoes in Georgia.

Katrina’s impacts were disastrous. In addition to the devastation by the storm surge, coastal landforms were altered. Some offshore islands are nearly gone, while new sediment has been deposited in other areas. Landform also appears to have limited the inland distance of the

storm surge in some areas. Debris deposited by Katrina's storm surge was found inland to the first marine terrace in coastal Mississippi. Having witnessed the second and most destructive to date hurricane landfall along the Mississippi coast, there are many direct and personal impacts – astounding, amazing, miraculous, and horrendous. Hurricane Camille in 1969 destroyed the Mississippi coast, but even worse destruction occurred from Katrina. Many structures which survived Camille were destroyed by Katrina, primarily due to Katrina's higher storm surge – about thirty feet in western Mississippi. The initial impact along the Mississippi coast was total destruction. Several towns no longer exist. (Photo by NOAA)



The impact on New Orleans came later from flooding as a result of failed flood walls that could not withstand the surge forces from Lake Pontchartrain. In northern Mississippi the direct impacts were trivial, compared to those at the coast, but there were power outages and damage over 250 miles from the coast.

However, many at Mississippi State had personal stories and tragedies to tell. One of our students' parents swam to safety from a top story window – in the storm surge. Another student lost his entire family in Gulfport. Most considered the legend of Camille as the ultimate possible hurricane in terms of its destruction along the Mississippi coast. Katrina has now replaced that legend.

Please remember to be prepared to renew your AEG-Carolinas Membership if you haven't already. And if you wish to join, or become a sponsor, we will have applications there at the Treasurer's Table.

Subject: Katrina - Geologic, Disaster, and Personal Perspectives – a talk by Darrel Schmitz, AEG President

Date: Friday, May 5, 2006

Time: 6pm social, 7pm dinner, 8pm speaker

Dinner:

Place: NC State University Club

4200 Hillsborough St

Raleigh, NC 27606-1419

<http://www.ncsuclub.com/>

(see directions below)

Cost: Member/Non-mem. \$25, Student: \$10

Reservations: Please make reservations with

Tyler Clark by Mon May 1. E-mail:

tyler.clark@ncmail.net

Or you may also snail mail your reservation to:

Tyler Clark

North Carolina Geological Survey

1612 Mail Service Center

Raleigh, NC 27699-1612

Phone: 919-733-2423

Association of Engineering and Environmental Geologists - Carolinas Section

Registration Deadline is Mon., May 1, 2006

Name: _____

Organization: _____

Address: _____

Phone: _____

Email: _____

This is a very special dinner catered by the University Club just for this occasion, so be sure and get your reservations in early!

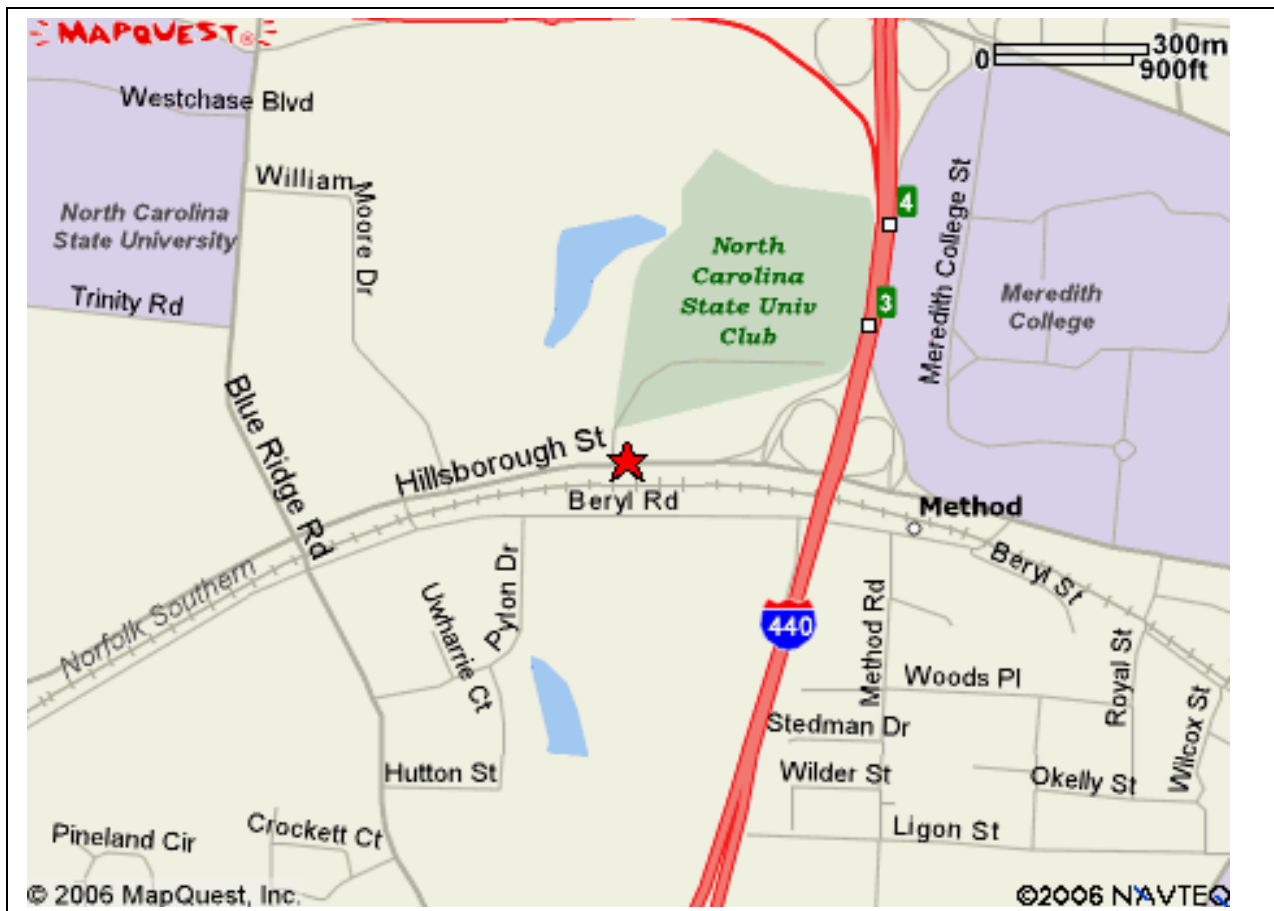
DIRECTIONS AND MAP: See next page, or for directions from your home or office, www.mapquest.com

Coming from Greensboro (West):

Get onto I-40 E via and go toward
 Burlington/Durham (64.7mi)
 Merge onto Raleigh-Chapel Hill Expressway via
 Exit 289 toward Raleigh North/ Raleigh East
 (2.9 mi)
 Merge onto I-440 S / US-1 S toward I-40 E /
 Hillsborough St./Sanford (0.5 mi)
 Take the NC-54 / Hillsborough St exit- Exit 3-
 toward Meredith College.(0.1 mi)
 Merge onto Hillsborough ST / NC-54 toward Cary/
 Chapel Hill. End at 4200 Hillsborough St

Coming from Charlotte (South):

From W 12TH ST., merge onto I-277 N / W
 Brookshire Fwy / NC-16 W via the ramp on the
 left.
 Go about a mile, then merge onto I-77 N / US-21 N
 via Exit 5A toward I-85 / Statesville.
 Take Exit 13A toward Greensboro.
 Go about 125 miles, take I-40 E toward Raleigh.
 Go 30 miles, merge onto Raleigh-Chapel Hill
 Expressway via Exit 289 toward Raleigh N/
 Raleigh E.
 Go about 3 miles, and merge onto I-440 S / US-1 S
 toward I-40 E / Hillsborough Street/ Sanford.
 Go 1/2 mile, take the NC-54 / Hillsborough St. Exit 3
 Go toward Meredith College for 0.1 miles.
 Merge onto Hillsborough St. / NC-54 toward Cary /
 Chapel Hill for 0.1 miles.
 N C State University Club is at 4200 Hillsborough
 Street



Message from the Chair

By Tyler Clark, AEG Carolinas Section Chair

Winter Meeting 2006

Thanks to all of you who attended the winter meeting of the Carolinas Section on February 2, 2006 in Concord, NC. Chuck Pippin, a hydrogeologist with the NC Division of Water Quality, gave a talk titled *Arsenic Occurance in the Unconfined Fractured Bedrock Aquifer System of the North Carolina Piedmont*. His recent work has focused primarily on arsenic distribution and source assessment and characterization of the transition zone in crystalline rock aquifers.

Pippin began by describing his study to assess the distribution of arsenic in North Carolina, which he initiated in 2000. He started by combining data collected from historically and recently sampled domestic water supply wells (DWSW) to produce a database of over 24,000 groundwater samples, of which ~10,000 samples have been geolocated based on address information. By performing a probability analysis, using indicator kriging, he identified a high probability zone for detectable arsenic in groundwater trending northeast/southwest through central North Carolina. This zone is spatially correlative with volcanic and volcanoclastic rock of the North Carolina Piedmont. Veined and disseminated sulfides were observed in cores in this region.

Laboratory analyses of respective sulfide minerals and their host rocks suggested that they were a naturally occurring source of arsenic. In addition, field-based geochemical studies of naturally occurring iron-manganese boulder and fracture coatings, ceramic streak plate experiments, along with additional sampling of DWSW, soils, stream water and stream sediment were used to understand arsenic fate and transport in the unconfined fractured bedrock aquifer system.



Pippin's interim conclusions suggest that chemical weathering of the upper bedrock results in the dissolution of arsenic from sulfide bearing minerals and, depending on groundwater chemistry, precipitates onto fracture surfaces. The fraction that is not precipitated is then flushed from the groundwater system via discharge to surface waters where moving from a groundwater system to a surface water system forces precipitation of iron and manganese

oxyhydroxides with which arsenic is co-precipitated.

Of particular interest is the role DWSW have on the geochemical system. Pippin explained that historically elevated arsenic levels have been recorded in Public Water Supply Wells (PWSW) from many areas in the state. These levels typically attenuate over a few years. The limited temporal data for DWSWs does not indicate similar reductions in arsenic levels. He

hypothesized that the greater production volumes of PWSW changes the local geochemistry, resulting in either the depletion of the source material or the prevention of conditions favorable for sulfide dissolution.

Spring Meeting 2006

The next meeting of the Carolina's Section is scheduled for May 5, 2006 in Raleigh, NC at the North Carolina State University Faculty Club. AEG President Darrel Schmitz will provide a short "state of the Association" update and some information on the AEG Foundation. He will follow this with a presentation on Hurricane Katrina: Geologic, Disaster, and Personal Perspectives (see abstract on page 1 of this issue). Our members are looking forward to meeting our new President in May. A detailed meeting announcement will be forthcoming.

(continued next page)

42nd Forum on the Geology of Industrial Minerals

The 42nd Forum on the Geology of Industrial Minerals will be held May 7-13, 2006, in Asheville, North Carolina. Technical and poster sessions will be held May 8-10, 2006. The early registration deadline is March 31, 2006; there is also late and on-site registration as well at a higher cost. Pre- and post-meeting field trips will showcase the diversity of our State's industrial minerals.

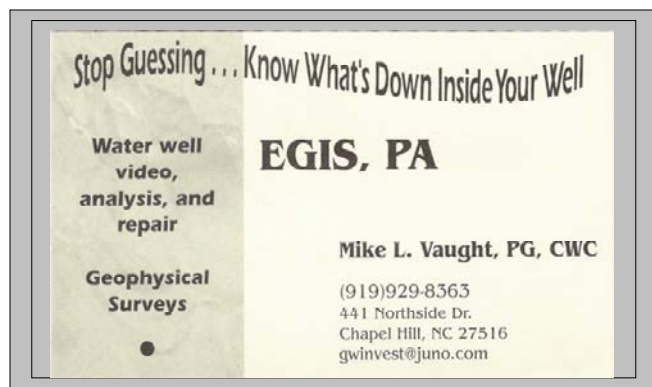
North Carolina typically leads the Nation in feldspar, common clays (brick), mica, olivine, and pyrophyllite production, and ranks high in the production of phosphate rock, gemstones (based upon value), industrial sand and gravel, and crushed stone. Significant quantities of dimension stone are produced. In 2004, the estimated value of nonfuel raw mineral production value for North Carolina was \$822 million, based upon preliminary U.S. Geological Survey (USGS) data.

Visit the Forum's website for additional information including: forum program and field trip information, spouse activities, and information about Asheville. The URL is: <http://www.geology.enr.state.nc.us/NCIndustrialMineralsForum/index.htm>

Cheers!!

Tyler Clark

Chair@aeqcarolinas.org



GeoNews is a joint publication of the Carolinas Sections of AEG and AIPG. There are four issues per year, with deadlines and issue publication dates listed below. We publish news of the profession, job openings, and positions wanted.

Deadlines can be flexible depending on events
 Spring – deadline March 1, issue date March 21
 Summer – deadline June 1, issue date June 21
 Fall – deadline September 1, issue date September 21
 Winter – deadline December 1, issue date December 21

Deadlines for submittals for the National AEG News:

March issue – January 21, 2006
 June issue – April 30, 2006
 September issue – July 31, 2006
 December issue – October 31, 2006

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GeoRamblings

By Charles W. Welby

There is for many a time in our daily lives which the poet Henry Wadsworth Longfellow described in the *Children's Hour*:

*"Between the dark and the daylight,
When the night is beginning to lower,
Comes a pause in the day's occupations
That is known as the Children's Hour."*

Sometimes thoughts of past adventures and geologic things attempted come to mind as we are lost in our reverie. Or possibly they do so at other moments of quiet retrospection. Perhaps there is a recollection of some observation made at one time which did not seem to have an important meaning at the moment but which sometime later triggered a thought about the solution of another problem. Or perhaps we all remember some instance in our youth which provided an impetus for us to become interested in things geologic. So it was recently as I was contemplating with feet propped up on my desk and my thoughts wandering back to somewhere in the mid-Paleozoic that I thought about one area which had a great influence on my turning to geology as a profession.

The Temblor Range in California runs southward along the southwestern edge of the San Joaquin Valley. The Temblor Formation, a largely diatomaceous shale, comprises a major portion of the range, although the geology is complex, and within the sequence there are a number of sands that have helped make the adjacent Midway-Sunset Oilfield the second largest producing oil field in the conterminous United States. Today there are several mines in the range bringing the diatomaceous shale to processing plants which turn it into kitty litter, and the outcrops in the range provide important information about the oil reservoirs that lie below the surface to the east. On the west side of the range the San Andreas Fault makes its famed mark along the eastern edge of the Carrizo Plain.

Once upon a time a wooden oil derrick sat at the mouth of one of the canyons draining from the range. The nearly vertical shale beds exposed in the canyon presented interesting aspects and questions to a young mind who often explored the canyon on foot and bicycle and wondered about the relationship between the outcrops and the oil well and the other wells nearby. Today the rig is long gone, and a maze of pipes brings steam to the well and adjacent ones and transports the crude oil brought out from the rocks below to waiting tanks.

Overlying the tilted shales are sands and gravels, and in some cases these sands and gravels reach down into the canyon. They were quarried on a small scale for local, domestic uses. It was also obvious that the streams draining the range had at one time spread gravels, sands and medium-sized boulders out into the valley lying east of the range and at a later time had cut down into the alluvial fans for some reason. Today we might attribute the down-cutting to different climatic conditions when the area was wetter. Or perhaps it is associated with rejuvenation of the streams as the Temblor Range rose in response to the forces associated with the southward shifting of the North American Block along the San Andreas Fault. Some of the sands associated with the Temblor Formation are believed to have been derived from what is known today as the Gabilan Block lying miles to the north.

So it was one New Year's Eve day that two young minds decided on a camping trip and exploration up the canyon. They packed some food in backpacks, put their bedrolls in a horseshoe over the backpacks and wandered into the canyon, a hike of four or five miles from the starting point. The afternoon and early evening were spent exploring in the canyon, observing some of its interesting geology, and making camp. One of the objectives of this particular outing was to spend a night in the "wild" with no cooking utensils (i.e., pots, pans) and to cook the meals without cooking utensils. The evening meal went well, for it was possible to cook wieners on sticks obtained from some of the dried wood (sage brush) lying around and to bake potatoes in the

ground below the campfire. However, the morning meal which was to consist of bacon and eggs presented another problem. One could bury the eggs in the sand of the canyon bottom and guess when the eggs would be done as either "hard boiled" or "soft boiled," or one could use a large piece of the diatomaceous shale as a "frying pan" and have fried eggs and bacon. So the latter method was chosen, and lesson about the strength of materials was learned.

During the night a typical winter pea-soup valley fog settled in, and one could not see more than 15 to 20 feet away from the campfire on a cold, damp morning. The campfire was started, and preparations were made for frying the bacon and the eggs. The bacon was cooked on the sticks that had been used for the wieners the night before; the eggs were placed on pieces of the diatomaceous shale an inch or so thick and perhaps 9 inches in diameter. Turning away briefly from the cooking eggs, the campers were surprised to hear what appeared to be rifle shots through the fog, yet there were no bullets whizzing by. Again there was a sharp crack, and pieces of the shale went sailing by their feet. Gradually the eggs cooked, and the "frying pan" became smaller and smaller. It appeared as if the eggs would finally end up in the fire before they were even finished cooking "sunny side up." However, disaster did not strike, and the "frying pan" survived until the eggs were done. So I guess that the moral of the story is "Be sure that your rock frying pan does not have any

moisture in it, either from the clay in the rock or from that absorbed from the atmosphere on a damp day." In any event, if you out of necessity have to cook an egg on a piece of shale, be sure that in this modern day of safety consciousness that you have a hard hat, safety goggles, heavy boots, and a medieval shield. As a final note to this story, both young minds later entered the geologic profession and at one time were both members of AEG.

On another matter, perhaps we should contemplate the following observation attributed to President Theodore Roosevelt, "*Every person owes part of one's time and money to the business or industry to which one is engaged. No one has a moral right to withhold support from an organization that is striving to improve conditions within their sphere.*" Perhaps in this newsletter the statement is "preaching to the choir" and only emphasizes that we as individual members of the geologic profession and related professions should make an effort to bring others of like interest into the "fold."

Charles W. Welby

Dr. Charles W. Welby is a former section chair for AEG. He can be reached at cww_ral@hotmail.com for comments

Roy Schlemon Conference **May 3-5** From AEG Headquarters

The 2006 Roy J. Shlemon Specialty Conference is being held May 3-5, 2006 in Durango, Colorado at the Historic Strater Hotel. The conference subject is "Mass Wasting in Disturbed Watersheds" chaired by Bill Haneberg, Sue Cannon, Paul Santi, and Jeff Coe. To register for the conference, go to the web site: www.haneberg.com/watersheds or go to AEG's web site (aegweb.org) and click on the Mass Wasting logo.

The objective of the conference is to bring together practitioners and researchers in order to define the current state of practice and identify unresolved problems with regard to the prediction

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and mitigation of mass wasting in disturbed watersheds.

Be sure to submit your abstracts to Julie Keaton at aegjuliek@aol.com. To make hotel reservations, call the Strater Hotel at 970-247-4431 and let them know that you are a participant in the "AEG Shlemon Specialty Conference" and receive your group rate. If you have any questions, do not hesitate to contact Bill Haneberg at bill@haneberg.com.

Invited guest speakers and talks include:

1. Tom Koler of the U.S. Forest Service; "Progress in forest engineering geology in The late 20th century and early 21st century -- the integration of engineering geology within ecosystem management of forested lands."
2. Laura Vaugois of the Washington Department of Natural Resources speaking about "Washington's landslide hazard zonation project: a process for addressing risk to resources."
3. Charlie Luce of the U.S. Forest Service speaking about "Mass wasting following forest fires: processes at multiple scales."
4. Sue Cannon of the U.S. Geological Survey speaking about "Tools for assessing post-wildfire debris flow probabilities and magnitudes."
5. Jon Major of the U.S. Geological Survey; "Mass wasting in volcanically disturbed watersheds: primary events, landscape responses, and geologically-ecological interactions."
6. Bill Laprade of Shannon & Wilson, "Effects of urbanization on mass wasting -- detrimental and beneficial."
7. Bill Haneberg of Haneberg Geoscience on "Landslides, lasers, and logarithms: the role of emerging technologies in watershed-scale slope stability assessment."
8. Rod Silde of Kyoto University (title to be announced)

Come and join us in Durango and don't miss this exciting conference!

Julie Keaton
aegjuliek@aol.com

AIPG – President's Message **By John Stewart, P.G.**

As the President of The Carolinas Section of AIPG I am looking forward to re-energizing the Section. This will not be an easy task and will require the input from all our members. I am committed to reaching out to the geoscience students and their advisers at all the major universities in North and South Carolina. We have a wealth of energy and information in these students and it is important to hear what they have to say and in a forum in which to say it. I look forward to developing a student paper competition. I will reach out to organizations such as the NCDOT which hosts annual Geotechnical, Geophysical, and Geoenvironmental Engineering Conference and Clemson University which hosts the David S. Snipes/Clemson Hydrogeology Symposium to provide a forum for this competition in the future.

For the seasoned and not so seasoned geologist and geoengineers, I will try to coordinate joint meetings and field trips with Carolinas AEG Section and Groundwater Professionals of North Carolina. These meetings provide a great way to learn about the geology of the Carolinas, but I am open to suggestions from all our members.

There will be an organizational meeting held in Charlotte, North Carolina during the NCDOT Geo³T² Conference. The conference will be held April 20-21, 2006 at the Charlotte Marriott Executive Park. Information on the place and time of the meeting will be sent to members and you contact me for details. Everyone will be welcome!

John M. Stewart, P.G.

John Stewart is with Trigon Engineering Consultants of Greensboro, and is the current President of the Carolinas Section of AIPG. He can be reached at 336.668.0093

jstewart@trigoneng.com

AIPG 43rd Annual Meeting "Sustainability" St. Paul, MN Sept. 23 - 28, 2006 CALL FOR PAPERS

We cordially invite geologists/geoscientists from all walks to share your research, experiences, and inspirations related to our theme of "Sustainability." We are not seeking knee-jerk responses to a buzz word, but rather the concerted deliberation that these times and our professional ethics warrant so that we may choose the paths ahead before they choose us. Some likely kernels to be addressed at the meeting include:

- sustaining the profession and science in general;
- geologic resources as a foundation for society;
- disruptive redistributions of geologic materials in the environment;
- interactions of natural hazards with the human population;
- education and public policy.

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Sparging Wells	Direct Push/Geoprobe

At this stage, we welcome fully-formulated abstracts (up to 250 words) as well as nascent ideas for presentations you wish to undertake. We seek a breadth of material related to different aspects of the topic, whether it is rooted in completed research or informed speculation. This is an opportunity to explore together the different meanings that "sustainability" can hold for professional geology and those who practice it. It is our hope that this collective assessment of the topic will offer AIPG some timely opportunities to incorporate this theme into our future endeavors.

SUBMISSION DEADLINE - JULY 15, 2006 To submit or discuss abstracts, contact: Charlie Tiller, PG, CPG - Technical Program Chair 651-659-1302 or ctiller@amengtest.com



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JOB OPPORTUNITIES

To announce a job opportunity in GeoNews, please contact Jane Gill-Shaler janehgill@aol.com or 336 687 6144

Schnabel Engineering –Geologist or Environmental Scientist

The Greensboro office of Schnabel Engineering is hiring a Geologist or Staff Environmental Scientist to join their team. As a member of our team, you will be responsible for assisting Project Managers with the execution of ESA type field studies, soil and groundwater sampling, subsurface investigations, and geophysical surveys by participating in field investigations, data collection, and reporting. **Contact Robert Cannon at rcannon@schnabel-eng.com for more information.** (This is a repeat announcement – the job is still open!)

Golder Associates - Environmental Professional (Ref. E1417-2142)

Growing Greensboro office looking for experienced environmental professionals with experience in remediation and/or environmental permitting and compliance. Responsible for client and project management. Must be capable of managing projects and proposals for environmental investigations, remedial design or environmental permitting and compliance. Must have strong communication skills and be capable of overseeing and directing others to perform a variety of tasks (engineering calculations; field work, preparation of reports, proposals, and applications; review regulations).

Requirements: B.S. in Engineering, Geology or Environmental Science required. M.S. preferred. 3 to 15 years of related experience required. North Carolina experience preferred. North Carolina license (Professional Engineer or Geologist) preferred; Current 40 hour Hazwoper training. This is a great opportunity in a growing employee owned company. Great benefits (inquire for summary of benefits); Smoke free, Drug free work environment; EEO. Email your response to beichlin@golder.com.



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VULCAN MATERIALS JOSEPH ANDRES GUTIERREZ EARTH SCIENCE MUSEUM

BY JIM STROUD

The Vulcan Materials Joseph Andres Gutierrez Earth Science Museum is one stop of “the Mountains to the Sea” fieldtrip offered at the Industrial Minerals Forum in May. This museum is located at Vulcan’s Mideast Division office in Winston-Salem, NC. The following article is about one of the many fantastic items on display there.

The Forsyth Gem & Mineral Club recently purchased a Psittacosaurus (pronounced SIT-ah-co-SAWR-us) for Vulcan’s Earth Science Museum. Psittacosaurus means “parrot lizard”. He was a small sized primitive bipedal ceratopsian plant eating dinosaur that had a parrot-like beak with teeth. A full sized adult would reach a length of 2 to 4 ft., height of 4 ft., and weight of 50 to 75 lbs. He had an estimated

life span of 10–11 years and lived during the Cretaceous Period 119-97 million years ago.

This is a true baby male Psittacosaurus Dinosaur that has been cleaned of matrix and has been fully mounted in an action pose. The Psittacosaurus was originally discovered in 1988. This one was found in Liaoning Province, China, Jiufotang Formation in 2004. A complete dinosaur is a rarity, but a baby specimen is extremely rare!!!

There has, as to be expected in any complete articulated vertebrate specimen, been some repair and restoration. The ribs have been cast because the original ribs were in such poor condition. This little fellow is estimated to have been approximately 1 year old.

The Forsyth Gem & Mineral Club has affectionately nicknamed this little fellow, “Hungry Joe” after the museum’s name sake, Joe Gutierrez. If you’d like more info on Hungry Joe or Vulcan’s Museum email Jim Stroud at stroudj@vmcmail.com.



“Hungry Joe,” affectionately nicknamed baby male Psittacosaurus Dinosaur currently featured at the Vulcan Materials Joseph Andres Gutierrez Earth Science Museum in Winston Salem.



Announcing the
"42nd Forum on the Geology of Industrial Minerals"
 in Asheville, North Carolina.
Technical and Poster Sessions will be May 8-10, 2006
 with pre-and post-meeting field trips showcasing
 the diversity of our state's industrial minerals.

Please visit our website
 for more information on registration,
 preliminary programs, field trips, spouse activities and
 the Asheville Area Chamber of Commerce.

<http://www.geology.enr.state.nc.us/NCIndustrialMineralsForum/index.htm>

**42nd Forum
 on the Geology of
 Industrial Minerals**
2006
May 8-10 Asheville
north carolina usa



JOINT FLOODPLAIN CONFERENCE PLANNED FOR APRIL 5-7 IN SC

The North Carolina Association of Floodplain Managers (NCAFP) and the South Carolina Association for Hazard Mitigation (SCAHM) invite you to participate in a **rare joint conference** and exhibition to be held April 5-7, 2006, at the Ocean Drive Beach & Golf Resort in North Myrtle Beach, SC. This will be the only spring floodplain management conference in the Carolinas for 2006. What better opportunity to connect with your peers in two states, while learning from each other as well?

The conference will be held at the [Ocean Drive Beach & Golf Resort](#), 98 Ocean Blvd. North Myrtle Beach, SC 29597
 Reservations: 800-438-9590
 For more information, go to
http://www.floods.org/carolinas_conference/



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We offer several levels of sponsorship, but they all have one goal: to keep the sponsor's name in front of our members and to bring you business. We have a real commitment to connecting our sponsors to potential buyers and will do all we can to help you build your business. Most of our members are practicing professionals with responsibility for selecting subcontractors, so our group is a great place to find new customers and to catch up with existing customers in an informal setting.

Our sponsors provide financial support that allows us to have reasonably priced dinner meetings, host seminars, provide discounted dinner meeting costs for students, underwrites the cost of newsletters and web site, and supports science education in our schools. All costs listed below are per year and begin on the date that your payment is received.

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 Web Page: Acknowledgement on the Carolina Section Web Page, www.aegcarolinas.org.

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 Web Page: Acknowledgement on the Carolina Section Web Page, www.aegcarolinas.org.

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 Verbal acknowledgement by name in Chairman's introductory comments.
 Meeting Exhibit: Space for tabletop display at three meetings.
 Cost of meeting waived for one person on the exhibit date.
 Email Announcements: Listing of your company name on each AEG - Carolina Section email announcement
 Web Page: Acknowledgement on the Carolina Section Web Page, www.aegcarolinas.org.

GeoNews Newsletter Sponsorship Only

Businesses or individuals can also advertise in the GeoNews without being a full sponsor. The annual rates for advertising in the GeoNews only are:

Business Card	\$ 40
Quarter Page	\$ 60
Half Page	\$100
Full Page	\$200

Please complete the form below and mail to Jane H. Gill-Shaler, AEG Newsletter Editor.

Please call if you have any questions (contact information below).

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DATE <i>(TBA: TO BE ANNOUNCED)</i>	EVENT	LOCATION	TIME	ADDITIONAL INFORMATION	ESTIMATED PDH
May 5, 2006	AEG dinner meeting, talk by Darrel Schmitz, AEG President, on Katrina (p.1 of this issue)	NC State University Club, Raleigh	6:30-9:00	For reservations, contact Tyler Clark at North Carolina Geological Survey, 1612 Mail Service Center, Raleigh, NC 27699-1612, (919-733-2423) or by email, tyler.clark@ncmail.net .	
May 7-13, 2006	42nd Forum on the Geology of Industrial Minerals (see notice in this issue)	Asheville	All Day Events	Alex Glover, Zemex, 828-765-8957, aglover@zemex.com Jeff Reid, NCGS, 919, 733-2423x403, Jeff.Reid@ncmail.net	8+
RECURRING MEETINGS IN THE REGION AND OTHER INFORMATION					
	Geologic Training	Columbia, SC	6:30-8:30	Periodic Training Sessions in Geoscience Topics Jack Gelting, 803-790-7215, Gelting1@juno.com 6042 Crabtree Road, Columbia, SC 2920	2
	Water Research Seminar Series	Various, but generally 1132 Jordan Hall, NCSU Campus	Usually 3:00 PM	http://www.ncsu.edu/wrri/wrriseminars.html Email: water_resources@ncsu.edu	

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DATE (TBA: TO BE ANNOUNCED)	EVENT	LOCATION	TIME	ADDITIONAL INFORMATION	ESTIMATED PDH
3rd Thurs. of the Month 	Forsyth Gem and Mineral Club Monthly Meeting	Vulcan Materials, 4401 N. Patterson Ave., Winston-Salem,	7:30 PM	Forsyth Gem and Mineral Club The Club holds monthly meetings and has an annual gem and mineral show. Phone: Jim Stroud at (336) 744-2940 Email: stroudj@vmcmail.com or Website: http://www.forsythgemclub.com/	
Generally on the last Thursday of the month 	AGS Monthly Meeting	Atlanta, Fernbank Museum	6:30 PM	The Atlanta Geological Society holds monthly meetings, generally on the third Thursday of the month, and quarterly field trips. President: john_costello@mail.dnr.state.ga.us Website: http://www.atlantageologists.org/	
 First Monday of each month except January	Southern Appalachian Mineral Society	Murphy-Oakley Community Center, Asheville, NC	7:00 PM	Southern Appalachian Mineral Society Field Trips to limited access and historic collecting sites take place from April to October. Information on the website and from (828) 298-4237 Website: http://www.main.nc.us/sams/	
Various Dates	Listing of National Geo Events of Various Groups	Various Locations		Geological Society of America Geoscience Calendar http://www.geosociety.org/calendar/	

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DATE <i>(TBA: TO BE ANNOUNCED)</i>	EVENT	LOCATION	TIME	ADDITIONAL INFORMATION	ESTIMATED PDH
March 	GSA Southeastern Section Conference		All Day	Geological Society of America – Southeastern Section George Stephens Email: geoice@gwu.edu SE Section: http://www.geosociety.org/sectdiv/ Meeting details: http://www.geosociety.org/sectdiv/northe/04nesemtg.htm	8+
	ASCE GeoInstitute Conferences and Links	Your Choice		American Society of Civil Engineers GeoInstitute http://www.geoinstitute.org/events/events.cfm	
March 	ACEC/NC and PENC Environmental Conference	NCSU McKimmon Center Raleigh, NC	7:30 am – 5:00 pm	http://www.acecnc.org Phone: (919) 781-7934	7
November, 2006 (Rock Give-Away Held on Even Years) 	Annual NCSTA Conference	Koury Convention Center Greensboro, NC		NC Science Teachers Association Bi-Annual Rock Give Away coordinated by NC Aggregates Assoc. To volunteer contact Fred Allen , Executive Director, NCAA; 919/782-7055; info@ncaggregates.org Website: http://www.ncsta.org/conference/index.html	

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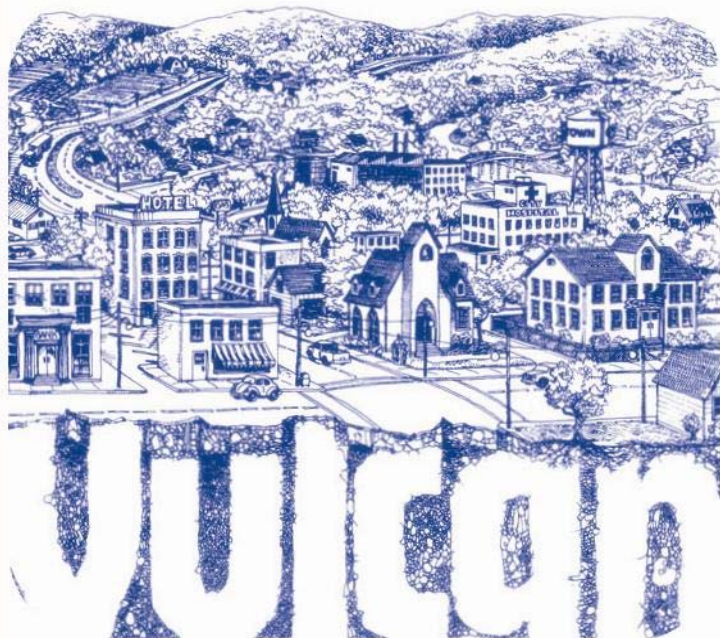
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