GEONEWS Fall 2008 TABLE OF CONTENTS

Articles
Dorian Kuper to talk Oct 16 in Greensboro.... 4
Virginia Geological Field Conference...........6-7
NC State to develop 'Internet Energy Grid'..16
2008 NDE Highway Geophysics Conference
Dec. 1-4 in Charlotte (flyer) ............... 18-19
2010 AEG Meeting Update .................... 20

Columns and Regular Features
GeoRamblings—By Dr. Charles Welby .......... 8
Job Opportunities .................................. 21
Announcements .................................... 22

Education Section
Slope Stabilization and Rockfall Mitigation
Workshop (flyer) ................................. 11-12
Help Needed for Earth Science Kit Giveaway
in Charlotte, Oct 30-Nov 1 .................. 13
Special Field Notebook Designed for Students
in AGI Kits .................................... 14
Deadline for Earth Science Week Contests. 14

Upcoming Events
CGS Field Trip (flyer) ............................ 24-25
Calendar of Upcoming Events ................. 28

Section Stuff
Deadlines for Submittals ......................... 2
Section Officers ................................... 2
Message from the Chair ........................ 3
Sponsor Application (flyer) ...................... 25
AEG Membership Application (flyer) ....... 26-27
Thanks to our Sponsors ......................... 31-32

COVER PHOTO
This photo shows one of the multi-million dollar
homes above the headwall of a reclaimed mine. The
development, named "The Quarry," is near Port-
land, Oregon. AEG Past President Dorian Kuper
and her husband Tom were consultants on this pro-
ject and took attendees of the mid-year Board of Di-
rectors meeting on a field trip here in May 2008.
Photo by Jennifer Bauer.

GeoNews is a publication of the Carolinas Section of AEG.
There are four issues per year, with deadlines and issue publi-
cation dates listed below. We publish news of the profession,
technical articles, and job openings.

Deadlines for submittal to GeoNews (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
June issue – April 30
September issue – July 31
December issue – October 31

AEG Carolinas Section – .................. Current Officers and Contacts
Chair .................................... Rick Kolb, rickkolb@mactec.com
Vice-Chair .................. Paul Weaver, vicechair@aegcarolinas.org
Treasurer ............ Dave Duncklee, treasurer@aegcarolinas.org
Secretary ............ Kristen Lloyd, secretary@aegcarolinas.org
Membership Chair........ Carin Kromm, cdkromm@mactec.com
Student Co-Chair ....Evan Riddle, Benjamin_draper@golder.com
Field Trip Chair .....Ben Draper, Benjamin_draper@golder.com
Past Section Chair ...................................... Tyler Clark
Advisor ............................ Jennifer Bauer, jennbbauer@gmail.com
Advisor ....................... Gary Rogers, advisor@aegcarolinas.org
AEG Carolinas Section Website ..................... www.aegcarolinas.org
Webmaster ............... Tami Idol, webmaster@aegcarolinas.org
AEG National Website .......................................... www.aegweb.org

AIPG Carolinas Section – Officers and Contacts
President ............................ John M. Stewart, 336-668-0093
......................................................... jstewart@trigoneng.com
Secretary/Treasurer ............ Russ Patterson, (919) 774-3770
...............................................russ@pattersnexploration.com
Membership Chair.....Macklin M. Armstrong, (919) 838-9933
................................................. armgeoeng@mindspring.com
GeoNews Newsletter Editor .......... Jane Gill-Shaler (336) 883-0170
................................................ janehgill@stanfordalumni.org
Emeritus Newsletter Editor .................. Phil Winchester, Jr.

GeoNews Newsletter Editor .......... Jane Gill-Shaler (336) 883-0170
................................................ janehgill@stanfordalumni.org

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MESSAGE FROM THE CHAIR
By Rick Kolb, AEG Carolinas Section Chair

By the time you read this newsletter, the annual meeting and subsequent board meeting in New Orleans will be over. I hope many of our section members attended. One of our own, Jennifer Bauer, will have been installed as Secretary of AEG, and will be on track to become President of AEG in three years. Congratulations, Jennifer! The next edition of the newsletter will include a summary article and photographs of the high points of the annual meeting and board meeting. Remember that our section will host the 2010 annual meeting, which will take place in Charleston. Briget Doyle, who will chair the meeting, is still looking for volunteers. Email Briget if you are interested in helping. (See page 20).

Our October 16 meeting in Greensboro will feature past AEG President Dorian Kuper as speaker. See her abstract and bio elsewhere in this newsletter (See page 4). If all goes as planned, Dorian will also make a presentation to geology students at Guilford College on the day of our meeting. One of Dorian’s objectives is the same as one of our section’s: to meet students, talk about career opportunities in environmental and engineering geology, and bring them into AEG. Please consider spending a day at a local university near you and talk to geology students about career opportunities. I have found that many students have no idea that there are so many jobs available for geologists.

The fall meeting is when we announce the results of our election of officers. Three of our members volunteered to serve on the board and ran unopposed. Kristen Lloyd of MACTEC (Greensboro) ran for Secretary, Dave Duncklee of Duncklee & Dunham (Cary) ran for Treasurer, and Paul Weaver of Trigon/Kleinfelder (Greensboro) for Vice Chair. I ran for Chair, and expect this will be my last year in that position. I thank these three for volunteering to spend some of their free time to improve our section. Remember that your section is only as strong as those who volunteer to run it. We are always looking for help, if only for new ideas and strategies. We welcome our members’ input anytime, any way. Feel free to email or call your board with questions, comments, or suggestions. Contact information is on page 2.

In tandem with the election, leaving the board were Secretary Rich Lovett of Golder (Greensboro), Raymond Knox of Schnabel (Columbia), Vice Chair Carin Kromm of MACTEC (Greensboro), and Student Membership Co-Chair Kyle Samperton of UNC. Thanks to those four for serving in these positions (Raymond has been Treasurer as long as I can remember). Carin will now spend her time as Membership Co-Chair, with student Evan Riddle of NCSU. We look forward to expanding our membership in the coming year. Our section now has over 100 members.

Rick Kolb
AEG Carolinas Section Chair

AEG CAROLINAS
FALL 2008 MEETING

Place: Natty Greene’s Pub & Brewing Co.,
345 S. Elm St, Greensboro, NC
(see directions on page 5)
Date: Thursday, October 16, 2008
Time: 6pm social, 7pm dinner, 8pm speaker

Program: Highwalls to Highways –
Engineering Geology Case Studies of
Aggregate Mining and Reclamation
Speaker: Dorian Kuper, Past AEG President
Cost: Member/Non-member $25
Students: FREE with student ID
Reservations: Carin Kromm,
CLKromm@MACTEC.COM
Our Thursday, October 16 meeting in Greensboro will feature past AEG President Dorian Kuper as speaker. See her abstract and bio below. If all goes as planned, Dorian will also make a presentation to geology students at Guilford College on the day of our meeting. One of Dorian’s objectives is the same as one of our section’s: to meet students, talk about career opportunities in environmental and engineering geology, and bring them into AEG. Please consider spending a day at a local university near you and talk to geology students about career opportunities. Many students have no idea that there are so many jobs available for geologists. The meeting will be held at Nattie Green's Pub and Brewing Company, 345 S. Elm Street, Greensboro (directions on Page 5)

Highwalls to Highways –
Engineering Geology Case Studies of Aggregate Mining and Reclamation

Abstract

Aggregate mining sites are about as popular as landfills and dams — no one wants them, and yet society needs them. Rock and sand and gravel aggregates provide the necessary building blocks for our roads, bridges, buildings and homes. Engineering and environmental geology play an important role in evaluating and permitting mining sites, as well as reclaiming the sites into secondary beneficial uses. The technical evaluation of a mine site involves field and laboratory work as well as quantifying the quality and quantity of the aggregate resource, and analyzing the impacts to the environment such as wetlands, wildlife, surface water and groundwater. The political side is as important as the technical side. Understanding neighbors’ concerns as they relate to mining – water, noise, dust, truck traffic and how a site will be mined and reclaimed—are issues that need to be addressed during the permit process.

This talk will present examples of how an engineering geologist evaluates a future mine site. It will detail the field aspects, the proposed mine plan, and how a site may be reclaimed, along with case histories. And it will show how geologists play a critical role in the political aspects of permitting mine sites by working with the decision makers. Advocacy of our profession is a huge goal of AEG and I hope to demonstrate how AEG can further educate and promote our profession with the public by presenting case histories.

Brief Speaker Biography

Dorian Kuper’s resume is solid gold, as we all know, but for you newbies out there; Dorian E. Kuper (M-OR) – BA degrees in Geology and Environmental Studies from University of California Santa Barbara, MS degree in Geology from San Diego State University and has 26 years of experience in Engineering Geology in Southern California, Oregon and Washington. Currently the President of Kuper Consulting in Oregon, focusing on engineering geology, permitting and mine plan reclamation for aggregate sites. Professional Registration in California, Oregon and Washington as an Engineering Geologist.

AEG Professional activities include: Currently the Past President of AEG, Legislative Liaison for Oregon AEG, Co-chaired Programs Director for (Continued on page 5)

Joyce Engineering, Inc. is a full-service solid waste management consulting firm dedicated solely to the solid waste industry. We specialize in providing engineering and environmental solutions for our clients throughout the Mid-Atlantic and Southeastern United States. From siting to post-closure management or environmental remediation, we are the waste industry experts!

Wayland Harris, Client Services Manager
Joyce Engineering, Inc., 1604 Ownby Lane
Richmond, VA 23220-1317
wharris@joyceengineering.com
ph # 804-355-4520 fax # 804-355-4282
Oregon AEG, co-authored and organized national and local AEG field trips, member since the early 1980’s. Past President of the National Association of State Boards of Geology (ASBOG - 2003), Chair of the Oregon State Board of Geologists (1998, 1999), and President of the San Diego Association of Geologists (1983), member of GSA, ASSMR and IAEG.

Directions:
Natty Greene’s Pub & Brewing Co., 345 S. Elm Street, Greensboro, NC 27401

From the East or West:
Take I-40 to Exit 218B, Freeman Mill Road North (also labeled as Coliseum Area). Go about 2-1/2 miles on Freeman Mill Road (the name will change to Edgeworth as you travel north) to Washington St., Turn right on Washington and go 5 blocks to S. Elm St. Turn right onto S. Elm, go about 1/2 block and park in the free public parking lot on the right. The meeting will be in a private room on the third floor.

From the South:
Take I-85 North and exit onto Business I-85 (about mile marker 120), then take Exit 122 (US 220, Future I-74). This will turn into Freeman Mill Road North, then to Edgeworth as you travel north. Go about 4 miles to Washington St., Turn right on Washington and follow the directions above.

To return to the interstate, go back the way you came on Elm and Washington St, passing over S. Edgeworth to S. Spring St. (dashed black arrows on detail map). Turn left on S. Spring St. which will merge back into Freeman Mill Road and take you back to the Interstate.
As the summer draws towards a close and, for many of us, another academic year opens, it is time to look forward to the Virginia Geological Field Conference in the fall. This year's conference will take place on Friday, Oct. 10th and Saturday, Oct. 11th; focusing on the Geology of the Saltville and Pulaski fault blocks in the Valley & Ridge of southwestern Virginia. It has been quite awhile since the VGFC has visited southwestern Virginia. This year's trip will be run by Fred Webb, Loren Raymond (Appalachian State University), and Bill Whitlock (Virginia Division of Geology and Mineral Resources).

The headquarters for the conference will be at Hungry Mother State Park (outside of Marion). On Friday evening a pre-trip gathering will start at 6:30 p.m. at the Hemlock Haven Conference Center in the park and the trip will depart at 8:30 a.m. on Saturday morning.

Registration fees will cover transportation, lunch, and the guidebook. Attached is the registration form (see page 7) and the registration deadline is Sept. 29th. Hungry Mother State Park has both camping and cabin options for lodging. For more information, consult the VGFC website (http://web.wm.edu/geology/vgfc/2008.php).

This will certainly be a scenic and exciting trip. I hope you can join us.

Chuck Bailey
President, VGFC
Professor of Geology, College of William & Mary
cmbail@wm.edu

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The 38th Annual Virginia Geological Field Conference

Geology of the Saltville and Pulaski Fault Blocks, Valley & Ridge province

October 10-11, 2008
Hungry Mother State Park, Marion Virginia
Fred Webb and Loren Raymond, Appalachian State University
Bill Whitlock, Virginia Division of Geology and Mineral Resources

The objective of this trip is to examine the contrasting geology of the regionally extensive Saltville and Pulaski thrust faults. The Saltville fault typically has a sharp fault plane that places Cambrian-age rocks over Mississippian-age rocks, but locally the fault zone contains slices of Cambrian- to Devonian-age rocks. This contrasts with the Pulaski fault that has a mappable disturbed zone (mélange to dismembered formation), aerially up to 1/4-mile wide, with Cambrian-age rocks faulted over Cambrian- or Ordovician-age rocks. Stratigraphically, correlative geologic formations have different lithologies and strikingly different thicknesses on the Saltville and Pulaski blocks, reflecting telescoping (by thrusting) of stratigraphies representing different depositional settings. Features important in interpretation of the geologic history, such as carbonate buildups, and unconformities provide additional points of interest for the conference.

The VGFC will be based at Hungry Mother State Park near Marion, Virginia. A pre-trip gathering will be held at the Hemlock Haven Conference Center in the park on Friday evening, October 10, with registration opening at 6:30 and the meeting commencing at 7:15 p.m. We will leave Hungry Mother State Park at 9:30 a.m. and return by 5:00 p.m. on Saturday. Transportation, lunch, and guidebook will be provided.

Questions: contact C. M. Bailey, 757-221-2445, cmbail@wm.edu or visit the VGFC website: http://www.wm.edu/geology/vgfo/

........................................................................................................
Names(s) ___________________________________________ Registration (by Sept. 29th 2008)
Address ___________________________________________ Student ($20) ________
City, State, Zip _______________________________ Regular ($45) ________
Telephone _______________________________ Late Registration (after Sept. 29th)
e-mail ___________________________________________ Student ($30) ________
................................................................___________ Regular ($55) ________
................................................................___________ Total submitted ________

Registration deadline is September 29, 2008
Make checks payable to Virginia Geological Field Conference and send to:

Virginia Geological Field Conference
Virginia Division of Geology and Mineral Resources
900 Natural Resources Drive, Suite 500
Charlottesville, Virginia 22903
A couple of times in the past, first in 2001 and again in 2004, the GEORAMBLINGS column has addressed “Professionalism” and the relation of professional societies such as AEG and AIPG to the concept of Professionalism. The original 2001 column forms the basis of this, the Fall 2008 column.

By education and experience one earns the title, “Professional Geologist.” The title is codified in some of the registration laws of various states. However, I would like to suggest that to be a professional in the sense of being a “Professional Geologist” involves a number of things, some concrete and some intrinsic. It is not my purpose to engage in a lengthy discussion of the definition of a professional but to note the importance of professional societies to the “Professional Geologist.”

Some of these societies and organizations bring to us ideas about the science of geology; others contribute opportunities to understand better how we can apply our knowledge of geology in the public sector, and still others address questions of competency and ethics. Probably most professional societies have an element of the ethics question in their mission. Through one or more of these societies and organizations we develop our personal image of our professional practice, and colleagues and the public develop their respective images of us.

In the May 1999 issue of the Journal of Petroleum Technology the President of the Society of Petroleum Engineers, Gustaveo Incarte, devoted his column to discussing general career patterns and the need for professionals (engineers in the petroleum industry in his case) to recognize the several steps in career patterns and that the need to maintain technical knowledge and skills is a life-long process.

At a first stage or step in a career (sometime in the first five years after graduation) one recognizes the need for more practical courses than found in the university scenario. In the second stage, beginning about 5 years after graduation, the professional wishes for more competence in the basic sciences and begins to show an absence of understanding of the newer scientific or theoretical matters. Approximately 10 years after graduation from the university the professional finds the need for more administrative and managerial knowledge—supervisory, administrative, and managerial skills. In the final stage (about 25 years after graduation and into retirement) the professional recognizes the lack of appreciation of cultural activities and matters and begins to realize that this absence of cultural insight and understanding has affected career development or that turning to them may broaden one’s outlook and make one a more effective professional.

So in the case of a professional geologist feeling technically incompetent some 10 years after graduation is not appropriate. Developing into and maintaining one’s self as a competent professional begins the moment one receives that diploma and the congratulations of relatives and friends.

Incarte suggested that career development can be illustrated by a three-legged table in the form of an equilateral triangle. Situated at the corners of the table are Universities, Industry, and Professional Societies. The role of the Universities is to educate; the role of Industry is to train; and the role of the Professional Societies is to disseminate technology. The area within the triangle represents the Professional who is a product of the three elements comprising the triangle. Representation of an individual’s “professionalism” at any one point can be garnered by plotting a position within the triangle based upon that individual’s experiences related to the three corners.

Recognizing that during one’s career there is obsolescence in technical knowledge, one must continually seek to keep building on what has gone before by taking responsibility for “keeping up to date” through life-long learning and broadening of one’s horizons. AEG and AIPG provide some of the material from the Professional Society corner of the triangle.

An important aspect of our individual responsibilities as Professional Geologists is to keep abreast of current and new developments in the science of geology, to appreciate and learn about developments in other disciplines which might enhance
our use of our geologic knowledge to promote the
general welfare and betterment of society, and to
explore how as individuals we can best use our skills
and talents. It has been observed that these aspects
of our lives are aided by belonging and participating
in the activities of one or more professional societies.

It has been suggested that we should spend
up to 20% of our own time improving our knowl-
dge and skills as they relate to our professional ac-
tivities. Included in this 20% are time reading pro-
fessional journals and attending professional meet-
ings such as those of the Carolinas Section of AEG
and Carolinas Section of AIPG. Membership in the
AEG and in the AIPG offers opportunities for each
of us to expand our knowledge and our
“Professionalism.” Belonging to both organizations,
I feel that each has a role and has had a role in my
professional activities, and that they complement
each other in many ways. I hope that you believe
each has an important place to play in your profes-
sional life and that as renewal time for your mem-
bership approaches, or has approached, you will “re-up”
early and promptly. The geological profession needs
your support through these two organizations, and
you need the opportunities for technical intellectual
enhancement that these organizations provide, some
formal, some through “Networking.” Over and be-

Some Wisdom from Will Rogers: “If you find your-
self in a hole, stop digging.” A possible addendum
might be, “Don’t forget the bracing.”

“Good judgment comes from experience,
and a lot of that comes from bad judgment.”

Related interesting reading are some of the
articles in American Scientist by Professor Henry
Petroski from Duke University.

John Muir reminds us: “When one tugs at a single
thing in nature, he finds it attached to the rest of the
world.” Perhaps Muir’s observation might be a
“theme song” for considerations of “Sustainable De-
velopment,” a term in common usage on the present
political scene.

Charles W. Welby
Dr. Charles W. Welby is a former Section
Chair for AEG Carolinas and a regular contribu-
tor to this newsletter. He may be reached at
cww_ral@hotmail.com.
Slope Stabilization & Rockfall Mitigation Workshop

Course description:
This short course trains participants in a review of the basic forces involved with shallow slope instabilities as well as deeper sliding surfaces as well as an introduction of various slope stabilization methods. Participants will use the latest version of a unique computer software programs developed for dimensioning anchored wire mesh slope stabilization systems and rockfall simulation. Also covered will be an overview of rockfall mechanics and protection concepts with topics including rockfall hazard rating systems and the Ritchie method for rockfall protection.

Who should attend:
This course is intended for consulting engineers and geologists, transportation agencies, municipalities, public works, as well as landscape architects and specialty construction contractors who are engaged in slope failure prevention.

Recommended background knowledge:
Minimum undergraduate level understanding of geology and/or geotechnical engineering and some experience with basic slope stability concepts. Bachelor's level education or higher in Civil Engineering, Geotechnical Engineering, Geology or related fields.

What you will learn:
Participants will receive an introduction to methods of stabilizing shallow slope failures with anchoring and facing, with particular emphasis on the performance, cost and aesthetic advantages of using high-tensile strength wire mesh in comparison to other types of facing materials, such as shotcrete, gravity walls, wire rope nets, or standard wire meshes. The basic theory of a dimensioning concept will be presented, and the RUVOLUM® program will be introduced and distributed to each participant. Also covered will be the Colorado Rockfall Simulation Program (CRSP). Participants will learn the proper use of the program's software and how the results are used to identify possible mitigation options. Practice using both software packages on actual project case studies will be included. Upon completion, participants will have and be able to use the software for potential slope stabilization and rockfall projects.

Workshop is sponsored by Geobrugg North America, LLC and the Association of Engineering Geologists.

Workshop Fee:
AEG members: $225    Non-members: $275
Includes: RUVOLUM® 7.0 and CRSP software programs, slope stabilization system manual, case studies and catered lunch. Bring your laptop. (Windows PC compatible only). Power cords provided. 0.8 CEUs

Instructors:
William F. Kane, PhD, PG, PE
Geotechnical Consultant. KANE GeoTech, Inc.

Frank Amend, Host Manager
Geobrugg North America, LLC

Schedule:
Morning session: 8:30 am – noon
Complimentary catered lunch: Noon – 1:00 pm
Afternoon session: 1:00-5:00 pm

Date and Location:
October 2, 2008, Thursday
James Madison University
Harrisonburg, Virginia

Register by fax: 540-438-6166  attn: Deborah
Phone inquiries: 540-438-6161
Email inquiries: deborah.johnson@geobrugg.com

REGISTRATION FORM
Class size is limited, so early registration is encouraged. On-site registration will be accepted on a space-available basis. Registration deadline is one week before each workshop for catered lunch reservations.

Payment must accompany registration—Visa, MasterCard or company check

☐ VISA ☐ MASTERCARD

#__

EXP DATE:

Signature

☐ AEG member $225  ☐ non-AEG $275

☐ YES, I would like CEUs for this course.
Slope Stabilization & Rockfall Mitigation -- Course Outline

October 2, 2008; James Madison University, Harrisonburg, VA
Instructor: William Kane, PhD, PG, PE, President, KANE GeoTech, Inc.

08:30 – 08:30 Review of the basic forces involved with shallow slope instabilities as well as deeper sliding surfaces. Introduction of various slope stabilization methods.

09:30 – 10:00 Slope Stabilization Design using the RUOLUM® concept for designing tensioned wire mesh systems. Participants will learn about the interaction of the mesh and anchors of these systems with slope materials, the basic theory behind the dimensioning concept, and proper use of the concept and software.

10:00 – 10:15 BREAK

10:15 – 12:00 Slope stabilization case histories including hands-on exercises using the design software.

12:00 – 13:00 LUNCH

13:00 – 14:00 Overview of rockfall mechanics and protection concepts. Topics will include rockfall hazard rating systems and the Ritchie method for rockfall protection.

14:00 – 15:00 Introduction to the Colorado Rockfall Simulation Program (CRSP). Participants will learn the proper use of the program’s software and how the results are used to identify possible mitigation options.

15:00 – 15:15 BREAK

15:15 – 16:00 Case Studies: “Rockfall Simulation using CRSP”

16:00 – 17:00 Overview of rockfall mitigation techniques including the use of draperies and rigid and flexible barriers.
HELP NEEDED FOR NSTA EARTH SCIENCE KIT GIVEAWAY IN CHARLOTTE

HELP FUND THE EARTH SCIENCE KIT GIVEAWAY

The National Science Teachers’ Association (NSTA at http://www.nsta.org/) regional meeting is at the Charlotte Convention Center in Charlotte from October 30 through November 1, 2008 (http://www.charlotteconventionctr.com/). For years, AEG Carolinas has bought hundreds of the AGI Earth Science Kits to be handed out free of charge to those who could most make use of them, science teachers in elementary and middle schools. The Kits are a wonderful colorful, package of teaching tools, posters and DVDs designed specifically with the science teacher in mind. You can see more at http://www.earthsciw.org/materials/index.html) The kits cost about $6.70 each, and we are asking people, businesses, and organizations to contribute whatever they can to help purchase them in bulk. As this is a regional meeting of NSTA, 2000 or more teachers are expected to attend. As of the date of this publication, we have received enough for 558 kits. That’s a lot of students who will be helped! Donors will be listed in a label on each kit that is given away. Diamond donors $2,000 and up; Platinum donors $500 to $1,999; Gold Donors $100 to $499; Silver donors $25-$99. Division of Land Resources booth. Contact Rick Kolb to donate (at RAKolb@MACTEC.com) or for more information.

COME HELP BAG ROCK SAMPLES

We also need volunteers to help bag up several barrels of free rock and mineral samples donated by the SME NC Aggregates Association (http://www.ncaggregates.org/education.php), for distribution to science teachers. These are very popular with science teachers, as their students get their own rock or mineral sample to take home. Volunteers are needed on October 29 from 1:00 to 6:00 pm at the Charlotte Convention Center storage area to bag samples. Please contact Randy Bechtel (randy.bechtel@ncmail.net) to sign up, or for more information (put ROCK VOLUNTEER in the subject line). NCGS is the lead agency.
FIELD NOTEBOOK DESIGNED ESPECIALLY FOR STUDENTS
From AGI Email

Just one of dozens of educational materials in the Earth Science Week 2008 Toolkit - from posters and calendars to activity books and CDs - is the “No Child Left Inside” Field Notebook. But the Field Notebook, made possible by contributions from USGS and Rite in the Rain, is a special part of this year’s celebration.

Rite in the Rain, which manufactures full-size notebooks for fieldwork by professional geoscientists, has created this miniature Field Notebook - with “all-weather writing paper” and charts on types of clouds, soils, and geological map symbols - for Earth Science Week 2008 (October 12-18). By recording their observations and conclusions here, students get a taste of the work performed by professional geoscientists.

“No Child Left Inside,” the theme of Earth Science Week 2008, has become a rallying cry for a growing movement. Efforts by government agencies and nonprofit groups - from USGS to the National Park Service - are helping young people experience the joys of outdoor activity. Inspired by Richard Louv’s bestseller “Last Child in the Woods,” these activities aim to curb what the author calls “nature-deficit disorder” among America’s youth. Most recently, the U.S. House of Representatives passed the “No Child Left Inside” Act (HR 3036) on September 18, funding efforts to strengthen environmental education.

For Earth Science Week 2008 Toolkit ordering, special shipping, bulk orders, and more information, visit http://www.earthsciweek.org/materials/index.html.

THREE WEEKS LEFT TO ENTER ESW CONTESTS
From AGI Email

With entries due near the end of Earth Science Week - Friday, October 17 - science students and enthusiasts across the country are busy completing submissions for the Earth Science Week 2008 essay, visual arts, and photography contests. Send yours today!

The photography contest, open to all ages, focuses on “Earth Science Beyond Your Front Door.” Whether you are a young person yourself or an adult who works with youngsters, you can lead an educational outdoor adventure. Show your geoscience excursion.

The visual arts contest is titled “Studying Our Earth.” Students in grades K-5 are encouraged to draw, paint, or create a poster. Artwork entries should be two-dimensional and no larger than 24-by-36 inches. Show yourself as an Earth scientist using the inquiry approach to answer a question in nature.

Students in grades 6-9 may enter the essay contest: “Earth Connections.” Each one-page essay must be no longer than 300 words. Discuss how various natural processes on the Earth are interconnected and how they affect each other where you live.

The contests offer opportunities for students and the public to participate in the celebration, learn about the Earth sciences, and compete for prizes. Each first-place winner receives $300 and a copy of AGI’s “Faces of Earth” DVD set. To learn more, visit http://www.earthsciweek.org/contests.
This is a reminder of Geobrugg’s Slope Stabilization & Rockfall Mitigation Workshop that will be held at James Madison University in Harrisonburg, VA on Thursday, October 2nd. The flyer is on pages 11 and 12.

In the morning participants will receive an introduction to methods of stabilizing shallow slope failures with particular emphasis on the performance, cost and aesthetic advantages of using high-tensile strength wire mesh in comparison to other types of facing materials, such as shotcrete, gravity walls, wire rope nets, or standard wire meshes. In the afternoon the course will cover an overview of rockfall mechanics, rockfall rating systems, and explore the options of utilizing various rockfall mitigation techniques.

Everyone will receive a complementary copy of version 7.0 of the RUVOLUM® program, the Colorado Rockfall Simulation Program (CRSP), and will practice using the software on actual project case studies. Upon completion, participants will have and be able to use the software for potential slope stabilization and rockfall mitigation projects.
The National Science Foundation (NSF) announced on September 4 that North Carolina State University will lead a national research center that aims to revolutionize the nation's power grid and speed renewable electric-energy technologies into every home and business.

The NSF Engineering Research Center (ERC) for Future Renewable Electric Energy Delivery and Management (FREEDM) Systems, to be headquartered on NC State's Centennial Campus, will partner with universities, industry and national laboratories in 28 states and nine countries. The center will be supported by an initial five-year, $18.5 million grant from NSF with an additional $10 million in institutional support and industry membership fees. More than 65 utility companies, electrical equipment manufacturers, alternative energy start-ups and other established and emerging firms have committed to joining this global partnership.

The new center will develop technology that transforms the nation's century-old, centralized power grid into an alternative-energy-friendly "smart grid" that can easily store and distribute energy produced from solar panels, wind farms, fuel cells and other energy sources. This "Internet for energy" will enable millions of users to generate their energy from renewable sources and sell excess energy to the power companies. Researchers envision consumers using this "plug-and-play" system anytime, from anywhere.

An ERC award is one of the largest and most prestigious awards granted by NSF. The FREEDM ERC is one of five new ERCs awarded by the NSF's Generation Three ERC Program. The grant to NC State and its partners is a five-year commitment that is renewable for an additional five years. The award follows a two-year selection process by the federal agency.

(Continued on page 17)
Dr. Alex Huang, Progress Energy Distinguished Professor of Electrical and Computer Engineering at NC State, will be the center's director. The research will begin immediately, with a new headquarters for the center scheduled to open in 2010 on NC State's Centennial Campus.

Transforming the nation's power grid is vitally important as alternative-energy technologies prepare to flood the marketplace. Center researchers foresee widespread adoption of plug-in hybrid cars over the next several years, for example, but today's power grid would not be able to handle energy demand during peak charging times, such as when people return home from work in the evening. The smart grid developed at the center will also allow consumers to sell energy back to the power companies when demand is low, preparing the utilities for times when demand is greatest.

This new energy paradigm will speed the development of vehicles, appliances and other devices that can both store energy and send it to the grid. By merging advanced battery technology with windmills and solar collectors, the researchers will combine renewable energy production with electric energy storage in a network. The center's energy storage research will focus on storage technology with longer life.

Central to the research will be the development of a "green energy hub" that will power the center's headquarters and other buildings on Centennial Campus. The one-megawatt grid will serve as a test-bed for the center's research efforts and demonstrate the technology's potential.

Huang and other NC State researchers will collaborate with faculty at Arizona State University, Florida A&M University, Florida State University, Missouri University of Science and Technology, RWTH Aachen University in Germany and the Swiss Federal Institute of Technology in Switzerland. Industry partners supporting the research will work directly with the center's faculty, students and unique facilities, speeding innovations developed at the center to the commercial marketplace. The innovation process will be enhanced through the support of small start-up firms to explore product ideas, teaming with university students to give them first-hand experience in innovation and business start-ups. The ERC also will work with 18 state and local government organizations in North Carolina, Arizona, California, Florida, New York and Tennessee to stimulate entrepreneurship and innovation based on its research and technology.

Additionally, the center will feature an intensive education program, including a master's degree program and an undergraduate concentration in renewable energy systems. Researchers have fostered partnerships with 14 middle and high schools to give younger students and their teachers a chance to explore the research related to energy and power.

"We are honored that NC State is leading this important research," Huang said. "Work at this center will help prepare our country and the world to take full advantage of abundant renewable energy resources." For more information on the FREEDM Systems Center, visit its Web site at www.freedm.ncsu.edu.

ZEBRA is a specialized environmental contracting company dedicated to providing high quality subsurface sampling, installation, injection and data collection services to engineering and consulting firms. http://www.teamzebra.com/

919 424 6122
Call for Papers

One page electronic abstracts (200 - 400 words, single-spaced, 11-point font, without figures or photos, in MS DOC format are due by April 29, 2008. The abstract should include title of paper, author's names, affiliations of all authors, and contact information. See conference website for more details. Email your electronic abstracts to: geophysics@dot.state.nc.us.

Notification of abstract acceptance will be provided to authors on or before May 8, 2008. The primary criterion for abstract acceptance will be relevance to the conference focus on application of geophysics and NDE technologies to the highway and transportation community.

Conference Themes

• Abandoned Underground Mines
• Archaeology / Cultural Resource
• Bridge Deck / Superstructure
• Bridge Foundations / Substructure
• Bridge Scour / Unknown Foundations
• Delineation of Fractures / Faults
• Determination of Engineering Properties of Soils and Rocks
• Determination of Lithology
• Environmental Problems
• Imaging Depth to Bedrock
• Groundwater
• Mapping / Locating Utilities
• Pavements
• Roadbed Subgrade Problems
• Subsurface Voids
• Others: New Research, Technology, and Equipment

Steering Committee

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North Carolina Department of Transportation

Priscilla Duskin, P.G.
New York State Department of Transportation

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Missouri Department of Transportation

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Kansas Department of Transportation

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Quality Geosciences Company

David J. Horhota, Ph.D., P.E.
Florida Department of Transportation

Rick Miller, Ph.D.
Kansas Geological survey

Niklas Putnam, P.G.
Corps of Engineers

Benjamin S. Rivers, P.E.
Federal Highway Administration

Phil Sirles
Zonge Geosciences, Inc.

ANNOUNCEMENT

Dear professionals:
You and your colleagues are invited to attend

2008 Highway Geophysics-NDE Conference

December 1 – 4, 2008
Charlotte, NC
Marriott Executive Park

Earn up to 16.5 PDHs

Sponsored by:
North Carolina Department of Transportation

Co-Sponsored by:
Federal Highway Administration

Partnerships with:
TRB, Geo-Institute and EEIGS

Conference Website:
http://www.ncdot.org/~geophysicsconference/
Conference Vision
This conference seeks to enhance the quality, efficiency and safety of transportation systems by expanding knowledge and understanding of the state-of-the-practice and state-of-the-art use of geophysical and non-destructive evaluation (NDE) technologies. In exchanging the most recent information about geophysical and NDE methodologies, participants will gain a better understanding of their applications and limitations, maximizing their benefits, enhancing engineering practice, reducing costs and improving safety.

Conference Objectives
To exchange information on applied geophysical and NDE methodologies applicable to transportation facilities and infrastructure.

To promote the routine and appropriate use of geophysical and NDE methodologies to highway agencies.

To improve the practice of geophysical and NDE methodologies through the interaction of geophysicists and practitioners, and their respective knowledge.

Who Should Attend
The conference is intended to provide a stimulating forum for engineers, geophysicists, geologists, program managers, and other decision makers regarding application of geophysical and NDE methodologies to transportation facilities and infrastructure.

Preliminary Schedule

**Monday, December 1, 2008**
- 2:00 8:00 Exhibit Setup
- 2:00 5:30 Registration
- 5:00 7:00 Ice Breaker Reception

**Tuesday, December 2, 2008**
- 7:00 4:00 Registration
- 7:00 8:00 Continental Breakfast
- 8:15 10:00 Opening Remark and Meeting
- 10:00 10:30 Coffee Break
- 10:30 12:15 Meeting
- 12:15 1:15 Lunch (provided)
- 1:30 3:15 Meeting
- 3:15 3:45 Coffee Break
- 3:45 5:00 Meeting

**Wednesday, December 3, 2008**
- 7:00 12:00 Registration
- 7:00 8:00 Continental Breakfast
- 8:15 10:00 Meeting
- 10:00 10:30 Coffee Break
- 10:30 12:15 Meeting
- 12:15 1:15 Lunch (on your own)
- 1:30 3:15 Meeting
- 3:15 3:45 Coffee Break
- 3:45 5:00 Meeting
- 5:30 6:30 Social Hour
- 6:30 8:00 Banquet

**Thursday, December 4, 2008**
- 7:00 8:00 Continental Breakfast
- 8:15 10:00 Meeting
- 10:00 10:30 Coffee Break
- 10:30 12:15 Meeting
- 12:15 Conference Adjourns

Registration

**Registration Fees**

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*For exhibit display > 8 ft wide. Please visit conference website for more details.

Conference Location
Conference will be held in Marriott Executive Park (see below). Limited rooms with a special rate of $63.75 plus room service and tax have been reserved for this conference.

Marriott Executive Park
5700 Westpark Drive
Charlotte, North Carolina 28217
Toll Free: (800) 228-9290
Phone: (704) 527-0650
Fax: (704) 527-7458

Key Dates

| Abstract Due | April 29, 2008 |
| Notice of Acceptance | May 8, 2008 |
| Draft Paper Due | July 15, 2008 |
| Review Comments to Authors | August 15, 2008 |
| Final Paper Due | September 15, 2008 |
| Tentative Program Dates: Preliminary Program | May 16, 2008 |
| Final Program | September 30, 2008 |
2010 AEG MEETING IN CHARLESTON—UPDATE

We have two more signups—Carin Kromm and Madelyne Adams— Thank you both! We need only FOUR more good people to help plan and manage committees. This is a great opportunity to get more involved and be a part of the biggest event AEG will hold in 2010. If you want more information, please contact Briget Doyle, the AEG 2010 Meeting Chair, at doyleb@cofc.edu. Contact information is below. Even if you don’t feel comfortable in a leadership role, your helping hands at this early date will still be appreciated.

Briget Doyle, AEG 2010 Meeting Chair, College of Charleston, 66 George St., Charleston, SC 29424. 843-953-0877, doyleb@cofc.edu.

2010 Annual Meeting Committees:

Field Trip Committee Co-Chairs: 
Tami Idol and Jennifer Bauer
Finance Manager/Committee Chair: 
Rick Kolb
Sponsor Solicitation Committee Chair: 
Jane Gill-Shaler
Outstanding Environmental & Engineering Geologic Project Committee Chair: 
Raymond Knox
Publicity Manager/Committee Regional Chair: 
Gary Rogers
Short Course Committee/Short Course: Teachers Workshop—Carin Kromm
Special Publication(s) Committee: 
VOLUNTEERS NEEDED
Special Activities Committee: 
Spouse/Guest Activities and Hospitality Room Manager/Committee 
Madelyne Adams
Student Volunteer Coordination Chair: 
Norm Levine
Technical Sessions Committee: 
Paul Weaver (we need another volunteer to help Paul)
Poster Sessions (Technical Sessions sub-committee or can be separate committee): 
VOLUNTEERS NEEDED
Symposia (Technical Sessions sub-committee or can be separate committee): 
VOLUNTEERS NEEDED

DUNCKLEE DUNHAM HIRING

Project Manager - Seeking a licensed/registered professional with 8 to 15 years of experience managing soil and ground water remediation projects. Projects to be managed include chlorinated solvent, nutrient, petroleum hydrocarbon, and Brownfield sites. Registered site manager (RSM) certification by NC DENR and experience across the southeastern US is a plus.

Project Geologist - Seeking a degreed geologist with 2 to 5 years of experience on soil and ground water remediation projects. Position is ideal for an individual who has accomplished proficiency in most soil and ground water sampling methodologies and is looking to progress into more of a project management role. The type and degree of project complexity is dependent on the persons experience and aptitude.

Please go to www.dunckleedunham.com for information on how to contact us.
TRANSFER OF I. K "TEX" GILMORE

The Mine Planning and Mine Services Departments of the Aurora Division of PCS Phosphate were combined this summer as the Mine Services Department. We are pleased to announce the transfer of Tex Gilmore to the position of Superintendent, Mine Services. Tex has been employed at Aurora since 1982 in the Mine Planning Department. Tex is a Licensed Geologist and has been the Aurora facility's only geologist for the past twenty years. He has been Superintendent, Mine Planning for the past ten years. Recently, he has provided assistance in the Mine Continuation Permit process and managed the Highway 306 and Norfolk Southern Railroad relocation projects. Tex and his wife, Dianne reside in Washington, N.C. Please join us in wishing Tex continued success in this new assignment.

ENVIRO-EQUIPMENT ANNOUNCES OPENING OF NEW CONTROL PANEL SHOP

Enviro-Equipment, Inc of Charlotte is proud to announce the opening of a new control panel shop as part of the remediation division of their long established equipment rental company. New services offered are building control panels to your specifications, or including a control panel with a new or used remediation system.

According to Evan Chew, remediation department manager of Enviro-Equipment, “We build weatherproof, Nema 4 control panels and Nema 7, explosion proof control panels, and can build panels as simple as a starter with an On/Off switch to control panels with logic controllers, modems and variable frequency drives. Chew also indicated a new service offered by Enviro-Equipment, related to their policy of recycling where possible. “We can also save you money by building used control panels with our large inventory of used control panel enclosures and components, he said, during a recent interview.

Chew indicated that the company is currently working towards UL certification, and will have the capability to build UL certified control panels soon. The next time you need a control panel please contact Evan Chew, remediation department manager, at 866-655-8267 or evanchew@enviroequipment.com.

ANNOUNCEMENT - DR. EDMUND MEDLEY, AEG/ GSA 2009 JAHNS DISTINGUISHED LECTURER

Edmund Medley, PhD, PE, CEG, F.ASCE is the 2009 Richard H. Jahns Distinguished Lecturer in Engineering Geology. The selection committee for this award is composed of representatives of the Association of Environmental and Engineering Geologists (AEG) and the Engineering Geology Division of the Geological Society of America (GSA). The intent of the partially-funded Lectureship is to encourage student and professional awareness of engineering geology through a series of lectures presented across North America during the award year. The award was established in 1988 to commemorate Professor Jahns (1915-1983), who had an influential and diverse career in academia, consulting and government. Details on the life and career of Professor Jahns are presented at edmedley.com (Jahns Lectures page). We are currently working on a speaking tour in NC and SC for spring, 2009. Stay tuned!

ENVIRO-EQUIPMENT INVITES AEG MEMBERS TO THEIR 15th ANNIVERSARY PARTY IN PINEVILLE

All AEG members, family and friends are invited to a huge barbecue party on Thursday, October 9, 2008, to commemorate Enviro-Equipment’s 15 years of serving the environmental community. Denise and Brian Chew welcome any and all professionals in the trade. The barbecue will feature food catered by Red’s Barbecue of Rock Hill, SC (http://www.redsbarbeque.com/); beer, wine and soft drinks will be served. The party is at their Remediation Systems warehouse, 10120 Industrial Drive, Pineville, NC, 28134, just south of Charlotte. Please RSVP by email to denise@enviroequipment.com, or leave a message at 704-588-7970, ext. 204. Admis-
mission is by a business card, so come on down and enjoy the PARTY!

Enviro-Equipment, Inc. is a woman-owned small business that rents and sells equipment and supplies for air, water and soil monitoring. Since Enviro-Equipment was founded in 1993 in Charlotte NC, it has experienced rapid growth and delivered superior customer service, proudly hiring experienced environmental professionals. Enviro-Equipment’s customers across North America include colleges and universities, government agencies, industry, and environmental consultants in the groundwater hydrology and industrial hygiene fields. For more information, please visit the company’s website at http://www.enviroequipment.com.

LOOKING FOR OIL RIGHT HERE IN NC

The 2008 CGS Field Trip and Annual Meeting
Spruce Pine Mining District - Little Switzerland, NC
October 31-November 2, 2008
Sponsored by the North Carolina Geological Survey

Alex Glover, Operations Manager of the Attapulgite Division, Active Minerals International, LLC, and the staff of the N.C. Geological Survey are pleased to host the 2008 Carolina Geological Society 2008 Field Trip and Annual Meeting at the Spruce Pine Mining District.

We have a busy fieldtrip planned include visits to the N.C. Minerals Museum where we will learn about mica mining by Native Americans, the Vulcan Materials quarry to examine the Ashe Metamorphic Suite, stop at an overlook of Pine Mountain to view the mining history of the region, visit Emerald Village at the historic McKinney Mine and trek to the underground Hoot Owl Mine. After the Banquet and Annual Meeting on Saturday evening, there will be a night fieldtrip to the Emerald Village to look at fluorescent minerals. On Sunday we will look at a newly exposed outcrop of the Linville Fault near the Linville Falls, learn about geological mapping and landslide mapping along the Blue Ridge Parkway on our way to the top of Mt. Mitchell to discuss the geology of Mt. Mitchell and Dr. Elisha Mitchell.

The fall colors should be excellent but everyone is reminded that early November in the Blue Ridge Mountains could have rain or chilly weather. Please bring foul weather gear. The stop at the Hoot Owl Mine will include ½ mile of walking to and ½ mile from the mine where we must cross a small stream. Everyone should have sturdy shoes for that hike. For the night fieldtrip, you should also bring a small flashlight.

The Pre-Meeting Announcement included the following information about the accommodations. The host hotel will be the beautiful Switzerland Inn in Little Switzerland located directly on the Blue Ridge Parkway (just outside of Spruce Pine, NC). This hotel has limited rooms (only 69), therefore early reservations are a must if you want to stay here. The contact for this hotel and other area hotels are listed below. This group of hotels is offering good rates and is holding blocks of rooms for CGS participants up until September 30th - so be sure to mention CGS/Carolina Geological Society or you may not get a room.

Switzerland Inn 828-765-2153
Big Lynn Lodge 828-765-4257 (rate includes dinner and breakfast)
Pinebridge Inn 828-765-5543
Pine Valley Motel 828-765-6276

And overflow in nearby Marion, NC at:

Comfort Inn 828-652-4888 (no special rate or need to mention CGS)
Hampton Inn 828-652-5100 (no special rate or need to mention CGS)

Note: Registration Deadline – October 14, 2008
# Registration Form

2008 Carolina Geological Society Field Trip

Spruce Pine Mining District- Little Switzerland, NC
October 31-November 2, 2008

Note: Registration Deadline – October 14, 2008
(Register Early. No On-Site Registration)

Note: Cancellation Deadline October 20, 2008

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Make Checks Payable to: CGS

Mail Check and Form to:
CGS-2008
C/O Kenneth Taylor
N.C. Geological Survey
1612 Mail Service Center
Raleigh, NC 27699-1612

For more information about registration: Contact Kenneth Taylor at (919) 733-2423 or e-mail – “Kenneth.B.Taylor@ncmail.net”
AEG CAROLINAS SECTION – SPONSOR INFORMATION

The Carolinas Section of AEG supports many of its activities with financial assistance provided by our sponsors. Our activities include quarterly meetings, periodic field trips and seminars, a quarterly newsletter, and email announcements about our meetings and geoscience related activities. In addition, we donate educational resources to science teachers.

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, underwrite the cost of newsletters and our 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.

Silver Sponsor ($250):

GeoNews Newsletter: Business card size ad (2” high x 3-1/2” wide), four times per year.
Meetings: Listing on a Sponsor Poster, located at sign-in table.
Verbal acknowledgement by name in Chairman’s introductory comments.
Meeting Exhibits: Space for tabletop display at one meeting. Cost of meeting waived for one person on the exhibit date.
Email Announcements: Listing of your company name on each AEG Carolinas Section email announcement (our email list is currently over 1,000 people)

Gold Sponsor ($375):

GeoNews Newsletter: Quarter-Page ad (4-1/2” high x 3-1/2” wide), four times per year.
Meetings: Listing on a Sponsor Poster, located at sign in table.
Verbal acknowledgement by name in Chairman’s introductory comments.
Meeting Exhibits: Space for tabletop display at two meetings. Cost of meeting waived for one person on the exhibit date.
Email Announcements: Listing of your company name on each AEG Carolinas Section email announcement

Platinum Sponsor ($500):

GeoNews Newsletter: Half-page ad (4-1/2” high x 7” wide), four times per year.
Meetings: Listing on a Sponsor Poster, located at sign in table.
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 - Carolinas Section email announcement

GeoNews Newsletter Sponsorship Only

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

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Please complete the form below and mail to Raymond Knox, AEG Carolinas Treasurer. Please call or email if you have any questions (contact information below).

AEG Carolinas Section Sponsorship Form

Please begin our sponsorship of the Carolinas Section of the Association of Engineering Geologists. Our level of sponsorship is:

[ ] Platinum Section Sponsorship, $500/year
[ ] Gold Section Sponsorship, $375/year
[ ] Silver Section Sponsorship, $250/year
[ ] GeoNews Newsletter Sponsor Only (see above)

Name: _________________________________________
Address: _______________________________________
_______________________________________________
Phone: _________________Fax: ____________________
Contact Person: _________________________________
Email:  ________________________________________
Website URL: ___________________________________
Date of Payment: ________________________________

Please enclose a business card or camera-ready ad. If digital files of the ads are available, please provide them in jpg, pdf, or doc. Email ads to Newsletter Editor, janehgill@aol.com.

MAKE CHECK OUT TO AEG CAROLINAS
Snail mail form and payment to:
Jane Gill-Shaler, AEG Carolinas Newsletter Editor
G.E.O.
1636 West Lexington Ave.
High Point, NC 27262
JaneHGill@aol.com
MEMBER BENEFITS

Networking, with colleagues at meetings, through technical publications and on the AEG web page, is a valuable professional development benefit because it allows a member to:

- Broaden and update technical, practical and business knowledge.
- Keep career paths open by assuring that the value, utility and scope of engineering geology is recognized in the scientific, technical, legal, and regulatory arenas.
- Explore numerous opportunities for career enhancement through contacts at technical meetings and in continuing education programs.
- Influence the profession of environmental and engineering geology as it serves society and as it is regulated.
- Establish the standards of the profession.

AEG members receive our quarterly professional journal, Environmental and Engineering Geoscience and six issues of the AEG NEWS as a regular dues benefit.

Members also enjoy a 20% “member discount” on all special publications, registration fees at meetings, short courses and field trips.

PROFESSIONAL DEVELOPMENT

AEG -- Serving Professionals in Environmental, Ground-Water and Engineering Geology since 1957

- AEG sponsors workshops and short courses for which official Continuing Education Units are offered.
- AEG encourages its members to participate in activities of mutual interest with other societies and organizations.
- The annual Richard H. Johns Distinguished Lecturer in Engineering Geology is co-sponsored by AEG and the GSA Engineering Geology Division.
- AEG members make presentations and lead field trips for students at all levels.
- AEG’s Technical and Professional Practice Committees keep the Association in a position of influence through their wide-ranging activities.
- AEG’s 25 Sections and 20 Student Chapters provide educational and networking opportunities for members through regular meetings, field trips and local newsletters.
- Students compete for scholarships and awards, and interact with practicing professionals.
- Short courses, field trips, and technical sessions provide opportunities for AEG members to enhance their professional practice.
- International members are found in more than 20 countries and Designated Correspondents enhance technology transfer among more than a dozen countries.

MEMBERSHIP APPLICATION

ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

The Association of Environmental & Engineering Geologists (AEG) is an international, non-profit scientific and technical society, whose 3,000 members include geologists specializing in engineering geology, environmental geology, and ground-water geology as well as other professionals in affiliated fields such as civil and mining engineering, land-use planning, public policy and education.

Through its technical and professional activities, AEG strives to promote the value and importance of geologic practice in:

- detecting, containing, and remediating contaminated soil and ground water;
- recognizing and mitigating hazardous geologic processes to promote public safety and welfare; and
- siting, planning, designing, constructing, and maintaining engineered works.

Check Us Out
www.aegweb.org
MEmBERSHIP REQUIREMENTS

MEMBER: Applicants for Member Class shall hold a degree in geology, engineering geology or geological engineering, or a degree in a related professional field with 30 semester-hours of credit in the geosciences. In addition an applicant shall be practicing in the field of Engineering Geology, Environmental Geology or Hydrogeology. Annual Dues for new (first-time) Members = $75.00 per year for the first three years of membership. Otherwise Annual Dues = $115.00. Applicants who qualify for Member Class, but are engaged in full-time teaching at the Primary or Secondary (K-12) level are eligible for Teacher Status (Annual Dues = $35.00).

AFFILIATE: Applicants for Affiliate Member Class shall be scientists or engineers who work with engineering geologists; teachers engaged in middle-school and high school Earth Science education; or persons interested in engineering geology. Annual Dues = $70.00 (Teacher Dues = $35.00)

STUDENT: Applicants for Student Member Class shall be full-time students enrolled in an academic program in the geosciences or in a related field in engineering. Annual Dues = $25.00

INTERNATIONAL: Applicants shall hold the same requirements as for Member Class, but may select from the following dues schedule: $35, which includes the Environmental and Engineering Geology Journal; $45 with the Journal, the Annual Directory and the Annual Meeting Abstracts; or $55 with the Journal, Annual Directory, Annual Meeting Abstracts and the AEG News.

AEG memberships are based on calendar year. Applications received after October 1 will be entered for following calendar year.

APPLICATION FORM

Please complete this form and mail it with your Annual Dues payment to the Association’s Headquarters. New member applicants do not pay Section dues for their initial year of membership.

Name: ____________________________
(Please print your name as you would like it shown on your membership certificate.)

PREFERRED ADDRESS:

________________________________________
________________________________________
________________________________________
________________________________________

WORK PHONE: ________________________ FAX: ________________________

PREFERRED E-MAIL: __________________________

Second Address: __________________________

________________________________________
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Home Phone: __________________________

________________________________________

DESIRED CLASS OF MEMBERSHIP: __________________________ ANNUAL DUES AMOUNT: __________________________

CERTIFICATION: __________________________ (Signature)

My signature attests that, to the best of my knowledge, I meet the academic and practice requirements for the membership class I have requested and that all entries on this application are true and correct. I also authorize AEG to charge my credit card for the dues payment, if I selected the credit card payment option.

☐ Enclosed is my check for the amount of Annual Dues of $ __________

Credit Card Payment Option
☐ Discover ☐ Master Card ☐ Visa Amount of Dues to be charged to my card = $ __________

Card Number: __________________________ Expiration Date: __________

SUBMISSION: Send this form with your check or credit card authorization to:
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Phone: 303-737-2926; FAX: 303-737-2969; AEG Web: www.aegweb.org
## CALENDAR OF EVENTS - 2008-2009

### Geological Events in the Carolinas

Courtesy of AEG Carolinas Section – [www.aegcarolinas.org](http://www.aegcarolinas.org)

Send updates/corrections to Carin Kromm, ckromm@mactec.com

Last updated September 21, 2008

*Meeting Date, Time, and Location are Subject to Change – Please Verify Prior to the Meeting*

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Contact</th>
<th>Est: PDH:</th>
<th>Est: PDH:</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2, 2008</td>
<td>Slope Stabilization &amp; Rockfall Mitigation Workshop</td>
<td>James Madison University, Harrisonburg, Virginia</td>
<td>Deborah Johnson, <a href="mailto:deborah.johnson@geobrugg.com">deborah.johnson@geobrugg.com</a></td>
<td>0.8 CEUs</td>
<td>Unknown</td>
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### CALENDAR OF EVENTS - 2008-2009

**Geological Events in the Carolinas**

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| Date: October 10-11, 2008, Friday and Saturday |
| Event: **Virginia Geologic Field Conference** |
| Location: Hungry Mother State Park, Marion, Virginia |
| Description: Geology of the Saltville and Pulaski Fault Blocks, Valley and Ridge Province |
| Contact: C.M. Bailey, cmbailey@wm.edu – registration by September 29, 2008 |
| Est: PDH: Unknown |

| Date: October 16, 2008, Thursday |
| Event: **Carolinas Section AEG Fall Meeting** |
| Location: Natty Greene’s Pub and Brewing Co., Greensboro, North Carolina (See p.. 3 for directions) |
| Description: (Past AEG President, Dorian Kuper), Siting Future Mine Sites |
| Contact: Carin Lee Kromm, clkromm@mactec.com |
| Est: PDH: Unknown |

| Date: October 30 – November 1, 2008, Thursday through Saturday |
| Event: **National Science Teachers Association Conference on Science Education, Charlotte, NC** |
| Location: Charlotte Convention Center, 501 S. College Street, Charlotte, North Carolina |
| Contact: Randy Bechtel, NCGS, randy.bechtel@ncmail.net (see story page 13) |
| Est: PDH: Unknown |

| Date: October 31 – November 2, 2008, Friday through Sunday |
| Event: **Carolina Geological Survey Field Trip and Annual Meeting, Spruce Pine District, Little Switzerland, NC** |
| Location: Marion, North Carolina |
| Contact: See page 23-24 for abstract and application. |
| Est: PDH: Unknown |

| Date: November 3– 6, 2008, Monday through Thursday |
| Event: **Southeast Regional Stream Restoration Conference** |
| Location” Renaissance Hotel, Asheville, North Carolina |
| Contact: [www.bae.ncsu.edu/programs/extension/sqg/srp/conference.html](http://www.bae.ncsu.edu/programs/extension/sqg/srp/conference.html) |
| Est. PDH: Unknown |

| Date: November 17-19, 2008, Monday through Wednesday |
| Event: **2008 Mid-Atlantic Regional Water Resources Research Conference** |
| Location: National Conservation Training Center, U.S. Fish and Wildlife Service, Shepherdstown, West Virginia |
| Description: The Water-Energy Nexus: A Necessary Synergy for the 21st Century |
| Contact: tamara.vandivort@mail.wvu.edu |
| Est: PDH: Unknown |
Date: December 4, 2008  
Event: GWPNC (Groundwater Professionals of North Carolina) Meeting  
Location: Carolina Ale House, Brier Creek, 7981 Skyland Ridge (near intersection with Glenwood Avenue) in Raleigh, NC. This location is tentative; Check the website (www.gwpnc.org) for location confirmation and speaker details.  
Time: Social hour 6-7 PM, dinner 7-8 PM, speaker (to be announced) 8-9 PM.  
Contact: www.gwpnc.org  
Est: PDH: Unknown

Date: December 1-4, 2008  
Event: 2008 Highway Geophysics NDE (Non Destructive Evaluation) Conference  
Location: Marriott Executive Park, Charlotte, North Carolina  
Contact: Scott Webb, NCDOT Geotechnical Engineering Group, 919-250-4088  
Email: geophysics@dot.state.nc.us (See page 18-19 in this newsletter for the flyer)  
Conference Website: www.ncdot.org/~geophysicsconference/  
Est: PDH: Unknown
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