

ASSOCIATION OF ENGINEERING GEOLOGISTS

"Serving Professionals in Engineering, Environmental, and Ground-Water Geology"

THE ROCKY MOUNTAIN SECTION NEWSLETTER

www.aegrms.org

MEETING DATE

**FRIDAY
JANUARY 24,
2003**

TIME

5:45 p.m. Social Hour
6:30 p.m. Dinner
7:30 p.m. Presentations

LOCATION

AEG Headquarters
720 South Colorado
Boulevard, Suite 960-S,
Denver, CO
See map below

COST

\$20 Members
\$22 Non-members
Free for Students first
time, \$10 then after

RESERVATIONS

c/o AEG Reservation Line
(303) 790-2161 x 243 or
meeting@aeqrms.org

**BY NOON,
WEDNESDAY
JANUARY 22nd**

Attention: Meeting Date and Location Changed for January Meeting, Friday January 24th

The speaker for the January meeting will be Scott Burns, the current AEG president, he will be presenting two talks as detailed below.

AEG: A Bright Future

Scott Burns

AEG President and Professor of Geology, Portland State University

AEG has gone through many changes this past year: a new headquarters, a new leadership team, a new publications board, a new fiscal year, new awards, and a new innovative specialty conference. President Scott Burns will summarize these new changes and some of the directions AEG is going. We are trying to build an organization that will represent the membership nationally and internationally, develop new leaders starting with students, strengthen sections, continue to cultivate partnerships with other professional organizations, and arrive at fiscal stability in the future. How can each of us play a part in our future?

Lessons Learned from Landslides

Scott Burns has been working in all phases of landslide research for 26 years. Using case histories he will summarize 15 different principles he has learned related to landslide mapping, research, and mitigation. Topics included will be: signs to look for and not look for, relationships to geology, field techniques, reactivation of old landslides, landslide development in "flat" terrain, human involvement in slides, landslides on volcanoes, earthquakes and landslides, developing maps to be used, importance of debris flows, looking for failure surfaces, and innovative fixes.

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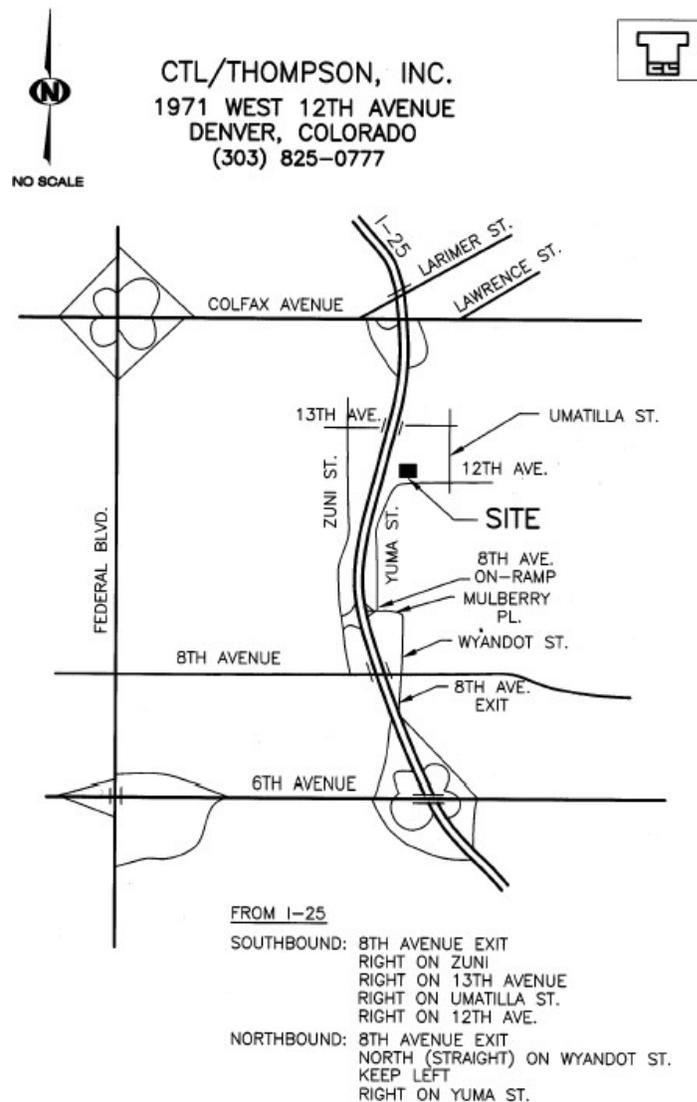
www.aeqrms.org

Student Night

Student night is approaching rapidly. Student abstracts are due to Ed Friend webmaster@aeqrms.org by Monday January 20th. Both undergrads and graduate students are encouraged to participate.

Vail 2003 Planning Meeting

There will be another planning meeting on December 14, 2002 at 6pm. The meeting will be at CTL Thompson (1971 West 12th Avenue - 303-825-0777). Refreshment and Pizza will be purchased. Cost will be \$8 per person.



The Use Of Explosives To Fragment Rock For Excavation

Harry Seibert

Explosives, when detonated in a confined space, produce an energetic reaction on the containing surfaces producing thermal energy and radial fractures. The rock will fragment as the reaction goes to completion in approximately 5 milliseconds. Even with controlled blasting, rock can be fractured along grain and crystal boundaries and joints and bedding planes can be impacted. Experiments relative to the Livingston Crater Concept indicate that rock is affected at least by ten times the borehole diameter. In some cases, the impact is 100 feet from the nearest loaded borehole. Having reviewed many rock slopes in Connecticut, failure for the most part was a function of block fall involving rock defects that were subjected to excess pressures. Extreme care in the blast design is required to minimize damage from the detonation of explosives. Slopes can be damaged with significant annual maintenance cost for highways and mining.

C.O. Brawner, 2001, Slope Stability In Surface Mining, Opening Remarks made the comment that mining pits are being designed to depths of 3000 feet, with 20 cy loaders and 500 ton haul units. To provide fragmented rock, 18-inch boreholes are required. He showed a slide with severe surface fractures 100 feet from the last loaded borehole. Rockfall in cuts can be due to damage from the use of explosives and subsequent weathering.

In my experience, without an adequate specification, the damage from the use of explosives has both short and long term costs. The modern drill and ANFO methods have reduced the cost of rock fragmentation. Unfortunately poorly designed blast plans create problems. It is necessary to indicate in the specifications an acceptable damage limit. A number of excavation firms can provide excellent results in the use of explosives. Blasting consultants can prepare a specification based on the desired result.

Tilford Field Scholarships

AEG has two very special scholarships that we offer each year. We are beginning to accept applications for the Tilford Field Scholarships! We will award two this coming spring - one to a graduate student and one to an undergraduate. The money will help the undergraduate with field camp or working on a field project for a senior thesis, and the graduate student will use the money for fieldwork on their thesis.

It is named after Norman Tilford who was our past executive director and an outstanding engineering geologist in the field. The award is given to qualified student members of AEG who have demonstrated scholarship, leadership and participation in their university programs.

To find out more about this award, contact the AEG website (www.aegweb.org) under the foundation subheading. Any questions, contact Debbie Green Tilford, chair of the NRT Scholarship Committee at tilgreen@aol.com.

If you are a student, consider applying. If you are a regular member and you know a qualified student, encourage them to apply.

Deadline for applications is January 31, 2003.

RMS 2002-2003 Speakers

February 13, 2003 - Student Night, *Students from South Dakota School of Mines and Technology and Colorado School of Mines*

March 13, 2003 - TBD

April 10, 2003 - TBD

May 8, 2003 - TBD



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Nonpaying AEG Members

With reorganization of headquarters, it is now the responsibility of the section chair to "remind" members to pay their dues. Below is the list of RMS members that have not paid dues as of November 30, 2002. Please check to see if your name is on the list. If you sent your check, you can disregard this notice. Thanks.

Last Name	First Name
Bausch	Douglas
Beach	Deborah
Belknap	Edwin
Benmark	Robert
Bennett	Warren
Bergstrom	Eric
Brinson	Jonathan
Buckner	John
Bukovansky	Michael
Buxton	Karen
Conner	Keirnan
Creameens	James
Crenshaw	Bradley
Cunico	Michelle
Denoyer	Alex
Edington	Dwaine
Evangelisti	Carlo
Gallagher	Matthew
George	Benjamin
Giberson	Christopher
Hardy	J. Kirk
Hepworth	Richard
Higgins	Jerry
Jernigan	Russell
Kelty	Juliet
Kohlman	Alyssa
Kolm	Kenneth

Last Name	First Name
Krier	Donathon
Kriss	James
Kunz	Michael
Linden	Gary
Lovekin	Jonathan
Lozano	Nicasio
MacDonald	Anjali
Macklin	Paul
Maez	Juan
Malek	Hany
March	Randy
McNab	Nancy
Miller	Scott
Mock	Ralph
Moler	William
Naugle	Greg
Nebel	Daniel
Neville	Michael
Noll	Amber
Olson	Remelle
Peterman	Bruce
Peterson	Kent
Schaut	Robert
Schneider	Edmund
Sharkey	Kevin
Siebert	Harry
Smith	William
Sorensen	Jenifer
Spitzer	Roy
Stokes	Rebecca
Sturdivant	Peter
Terry	Thomas
Thomson	Nancy
Tokash	Samantha
Upsall	Benjamin
VanderBeek	Greg
Venters	Joshua
Weir	Susan
Wells	Curt
West	Michael
Whitt	Gary
Yagiz	Saffet
Zeise	John

Office for Sublet

Sub-lease in office of geotechnical engineering firm. Approx. 225 sf - private with windows on atrium. Access to high speed internet service, laser printer, copy facilities, and secretarial services negotiable. Littleton Center – Excellent location adjacent to light rail. \$500, incl utils. Call Jim at 303.810.6011

Case Histories

This is a guest column we hope to continue with contributions from AEG members. Harry Siebert has again offered a column. We are looking for other professionals to share their insight and knowledge with their peers through this medium. If you have an article to contribute contact Kristi McQuiddy newsletter@aegrms.org.

Rocky Mountain Section Outreach Program

Attempts are being made to increase member participation in the outlying areas of the section. If you have ideas for an event, contact Ed Friend at webmaster@aegrms.org.

2003 Legislative Reception Hosted by the Colorado Section – American Institute of Professional Geologists

The Colorado Section of the American Institute of Professional Geologists (CO-AIPG) is hosting the Annual Legislative Reception for our State Legislators on Tuesday, January 28, 2003, from 5 p.m. to 7:30 p.m. The Reception will be held at the University Club, 1673 Sherman Street, Denver, Colorado. CO-AIPG sponsors the Reception annually to create an opportunity for geoscientists from industry, academia, and state and federal government to meet Colorado Legislators. The event is designed to be

educational for legislators. It is also an effective way of introducing them to potential sources of geoscience information for future reference and access. No lobbying is permitted at this reception.

The reception theme for 2003 will be "Water Resources in Colorado".

In addition to providing opportunities for legislators to network with constituents and gather sources of relevant geoscience information, networking also occurs between members of various participating technical societies (past ones include the Association of Engineering Geologists, Colorado Oil and Gas Association, Denver International Petroleum Society, Denver Mining Club, Friends of Dinosaur Ridge, Geological Society of America, and Rocky Mountain Association of Geologists). This event provides a stimulating social venue, outside of the typical single-society technical meeting, for geologists and engineers in the area to meet and discuss Colorado issues. Students interested in professional geology careers, jobs, and state issues also have the opportunity to network with many professionals and legislators at this reception, something that is not possible anywhere else in Colorado.

You are invited to participate in one of several ways:

- 1) Attend as an individual; Professional - \$27.00 prepaid/\$30.00 at the door Student - \$8.00
- 2) Co-Host - \$75 Includes two paid entrance fees and Publicity for your company
- 3) Exhibitor - \$150 for non-profit organizations and agencies only (exhibits should be educational, based on a theme of "Water Resources in Colorado", and relevant to Colorado) Includes three paid entrance fees, Publicity, and Space and a table for your exhibit
- 4) PowerPoint slide ad - \$275 for profit companies and consulting groups (contact David Abbott at dmageol@msn.com for specific information)

Registration Form

(this form also appears in the Dec. CO-AIPG newsletter)

Name(s)

Telephone

Number of individuals _____ X \$ 27.00 =
\$ _____

Please enclose a check made out to "Colorado Section AIPG".

Co- Host

Telephone

Guest

Please enclose a check in the amount of at least \$75.00 made out to "Colorado Section AIPG" and provide specific information for listing your name in materials for publicity.

Please send registrations and checks, before January 21, 2003, to:

Laura L. Wray
3747 South Jasmine Street
Denver, CO 80237-1127

Space for exhibitors is limited. Registrations for exhibitors will be accepted on a first come, first served basis upon receipt of registration form and payment. Hors d'oeuvres and beverages will be served. Limited free parking will be at the north end of the AMPCO lot at 16th Street and Sherman. Entrance to the lot is off 16th Street.

Words from the Chair

Our December Spouses/Family Night was one of the best ever with guest speaker Bob Raynolds from the Museum of Nature and Science. Bob spoke to a large group of section and family members about the importance of understanding

the past to help prepare for the future. His focus was on the usage and resultant depletion of the aquifers in the Denver basin and the lack of recharge due to present climactic conditions being much dryer than past tropical periods. The children loved the dinosaur connection and the spouses were enlightened about geologic aspects of a real socioeconomic issue.

The January meeting night and date will be changed to Friday the 24th in order to schedule AEG President Scott Burns as our guest speaker. Scott will be in Denver attending the AEG quarterly board meetings, that will now be held here regularly, and we jumped on the opportunity to have him present a technical topic and update us on the State of the Association. The meeting will be held at the AEG offices 720 South Colorado Boulevard, Suite 960-S, Denver, CO, 80246. As usual we will start at 5:45 pm with a social hour combined with an "Open House" viewing of the new headquarters, dinner presented by our outstanding caterers Penguini's of Golden and then a presentation by the President. A reservation is required for this meeting because of the change of venue. Please call the RMS reservation line at 303-790-2161 x 243 by Wednesday January 22, 2003 if you are planning to attend.

February will once again be devoted to the Student Chapters within the Rocky Mountain Section as student members present technical presentations throughout the evening. Be sure to attend this very special night. We will be seeking member and corporate sponsors to help defray the cost of the student's travel expenses and meals for all those who attend. So please consider becoming a sponsor and encouraging others to contribute to this once a year event.

Thanks
Jim Wright

Winter 2003 Review Courses for the ASBOG Geology Licensing Exam

The Association of Engineering Geologists is pleased to announce the Winter 2003 series of review courses for the ASBOG geology licensing exam taught by REG Review, Inc. AEG and REG Review, Inc. have partnered to provide these courses since 1992. In the winter of 2003, review courses will be offered at a new location near Atlanta, GA in addition to returning to the Baltimore area and both Northern and Southern California.

Course dates and locations are as follows:

Northern California Courses - (2003NC-1)
Samuel Merritt College
Health Education Center
400 Hawthorne Avenue, Oakland, CA 94609
DATE - Friday, January 10, 2003, 8am - 5pm

Northeastern US Courses - (2003NEUS-1)
Best Western Baltimore-Washington Airport
6755 Dorsey Road, Elkridge, MD 21075
DATE - Saturday, January 25, 2003, 8am - 4pm

Southeastern US Courses - (2003SEUS-1)
Best Western Atlanta Airport-East
301 North Central Avenue, Hapeville, GA 30354
DATE - Sunday, January 26, 2003, 8am - 4pm

Questions - call 603-472-3050 (East coast) or 650-947-8899 (West coast).

Preregistration deadline is January 10, 2002.

California Courses for the ASBOG and California Supplemental Exams are \$385 for AEG members, \$400 for nonmembers. ASBOG Courses for all other states are \$340 for AEG members, \$355 for nonmembers.

REG Review, Inc. has been teaching these courses in California since 1985. In March 2000, we began to direct our teaching towards the ASBOG geology licensing exam. The pass rate for students in classes since then has ranged from 85 to 98%.

The courses are taught by Patti Sutch, California RG 3949, CEG 1641, and CHG 25, and Lisa Dirth, California RG 3951, CEG 1240, and North Carolina RG by ASBOG exam. For current information and order/registration forms for 2003 study manuals, flash cards, and courses contact REG REVIEW, Inc. online at <http://regreview.com>, or at 37 Rosewell Road, Bedford, NH 03110. On the East Coast call Lisa Dirth at 603-472-3050, (fax) 603-471-1969. West Coast evenings Patti Sutch at 650-947-8899.

Aspiring Employees

Many resumes from students graduating in the very near future have been received. Employers, please contact Tim Petz pastchair@aegrms.org for information regarding potential employees for summer part-time or full-time work. Students can drop off your information with Tim at the meetings or via e-mail.

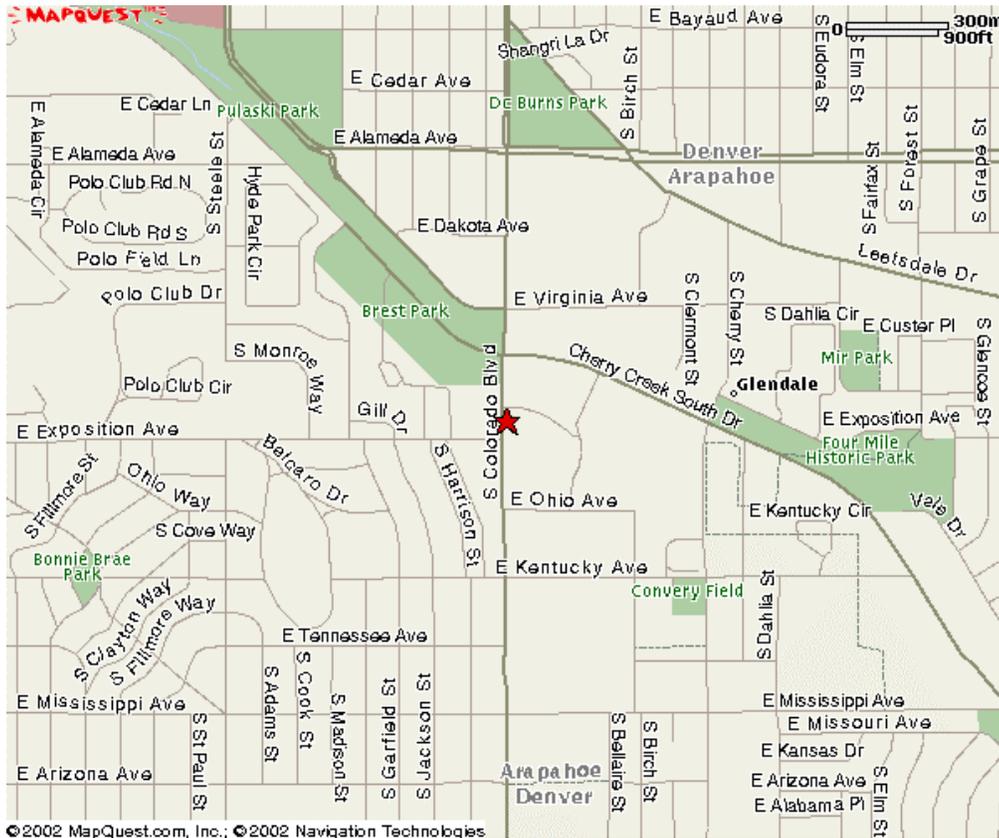
Your Business Card Here

The section is looking for companies or individuals who would like to advertise their products or services in the section newsletter and on the website. This is anything from a business card (\$10/month), quarter page spread (\$20/month), to a half page exposition (\$40/month). If you are interested, contact Ed Friend webmaster@aegrms.org or Kristi McQuiddy newsletter@aegrms.org.

Parting Words

Student night is next month and is always one of the most highly attended meetings of the year. Ed is still looking for student presenters, so send him your abstracts by Jan 20th at webmaster@aegrms.org. There will be a big push in the very near future to contact exhibitors. If you or your company would like to contribute or have a booth, please contact Jim Wright at chair@aegrms.org.

The Editors
Ed Friend, Kristi McQuiddy



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