

# ASSOCIATION OF ENGINEERING GEOLOGISTS

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

# THE ROCKY MOUNTAIN SECTION NEWSLETTER

#### **MEETING DATE**

THURSDAY DECEMBER 13, 2001

#### **TIME**

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

# **LOCATION GEOLOGY MUSEUM**

Colorado School of Mines Golden, CO

#### **COST**

\$20 Members \$22 Non-members Free for Students

#### RESERVATIONS

c/o AEG Reservation Line (303) 790-2161 x 243 BY NOON, FRIDAY DECEMBER 7<sup>th</sup>

# The Natural and Not-So Natural History of the Antarctic Peninsular Region

Jonathan Saul Caine, U.S. Geological Survey

As a student member of the 1989, 28<sup>th</sup> International Geological Congress field trip – *Tectonics of the Scotia Arc* lead by Ian Dalziel, I had the most wonderful opportunity to visit the region from southern-most Chile to the Antarctic Peninsula. We "steamed" on the polar research vessel, *Polar Duke*, though the Beagle Channel, across the Drake Passage, and visited most of the South Shetland Islands with a jaunt to the mainland. The talk will reveal the adventures of our journey and cover the brilliantly aesthetic natural history (geology, geography, flora and fauna) and daunting human history (exploration, hunting, and impact) of this last great wilderness. Be prepared for slides and stories about penguins, whales, seals, humans, lichen, mosses, grasses, oceans, icebergs, glaciers, mountains, rocks, and skiing!

#### **Not the Traditional Dinner**

Sweet Catering will be providing hors dourves by the plateful for our cuisine on family/spouse night. You will not go hungry as you stroll around the geology museum munching on small sandwiches, breads, cheeses, and desserts. Wine, beer, soda, and water will be available to wash it down.

#### Fall 2001/Spring 2002 Speakers and Locations

January 10<sup>th</sup> – Golden Community Center – Bob Schuster (retired USGS) - Dams Built on Pre-Existing Landslides

February 14<sup>th</sup> – CSM Student Center – Student Career Night

March 14<sup>th</sup> – Golden Community Center – Myles Carter, AEG President

April 11<sup>th</sup> – Golden Community Center – Dr. Perry Rahn, South Dakota School of Mines, AEG Jahns Distinguished Lecturer

May 9<sup>th</sup> – Golden Community Center – Open

Please let Peggy Ganse or Tim Petz know if you or someone you know would be interested in giving a talk at an upcoming RMS meeting.

## **Tremendous November Meeting Turnout**

Thanks to John White of the CGS, we had a HUGE turnout for our November meeting, thanks to all involved. Numbers like that on a monthly basis will definitely put our section on top! Good Job!

## **Swelling Soil Publication Wins National Award**

Colorado Geological Survey Special Publication 43, "A Guide to Swelling Soils for Colorado Homebuyers and Homeowners," has been announced as the winner of the 2001 Edward B. Burwell, Jr. Award by the Geological Society of America, Engineering Geology Division.

This prestigious award is made to the authors of a published paper of distinction that advances the principles or practices of Engineering Geology. Many of the previous award-winning publications have become hallmark references for the Engineering Geology and Geotechnical Engineering professions. Edward B. Burwell, Jr. was one of the founders of the GSA Engineering Geology Division, and was the first chief geologist of the U.S. Army Corps of Engineers.

Special Publication 43 was written by Dave Noe, William "Pat" Rogers, and Candace Jochim. The 76-page booklet is geared toward helping homebuyers and homeowners reduce damages from swelling soils, a particularly destructive geologic hazard found in many areas of Colorado. The booklet has become a favorite of the homebuilding industry, and is distributed to buyers of new homes for disclosure purposes. Over 100,000 copies of SP-43 have been sold since its publication in 1997.

The award will be presented at the Engineering Geology Division's Award Luncheon at the 2001 GSA Annual Meeting in Boston, MA, on November 7, 2001. Vicki Cowart, Colorado State Geologist, will be the citationist.

Colorado is home to a long list of previous Burwell Award winners, thanks in part to its stunning and challenging geologic setting, and because of the state's strong support of the geosciences. Past winners include Colorado residents James McCalpin, Keith Turner, Robert Schuster, Donald Coates, David Varnes, Edwin Eckel, and Glenn Scott.

This is the second national award of merit for Special Publication 43 and its authors. The publication received the John C. Frye Memorial Award in Environmental Geology from the Geological Society of America and the Association of American State Geologists in October 1998.

Special Publication 43 is available for \$7.00 (\$3.50 bulk discount) plus shipping and handling fees. For more information, please contact the CGS Publication Section at (303) 866-2611 or <a href="mailto:cgspubs@state.co.us">cgspubs@state.co.us</a>, or visit the CGS web site at <a href="https://www.dnr.state.co.us">www.dnr.state.co.us</a>.

#### **Aspiring Employees**

Many resumes from students graduating in the very near future have been received. Employers, please contact Tim Petz <a href="mailto:chair@aegrms.org">chair@aegrms.org</a> 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.

#### Sunrise Review of Licensure in Colorado

The Colorado Dept. of Regulatory Agencies (DORA) has submitted their review of proposed licensure of geologists in Colorado to the State Legislature. They have recommended against such legislation, contrary to the desires of the geologists who met with them on this matter. Their review includes factual errors (e.g., stating that many states with licensure did not allow for grandfathering, which is not the case in all known past licensure efforts), and other inaccuracies. Proponents of licensure are considering further action and response to the DORA review.

# **Geological Society of America National Meeting 2002**

The 2002 GSA meeting will be held here in Denver next October 27-30. The Engineering Geology Division of GSA is beginning to assemble a program. General information on the meeting and the forms for submitting session proposals is available at <a href="http://www.geosociety.org">http://www.geosociety.org</a>. If you have questions for which you cannot find the answer on the web page, please contact Judy Ehlenor <a href="mailto:jehlen@tec.army.mil">jehlen@tec.army.mil</a> or Bill Haneberg, <a href="mailto:bill@haneberg.com">bill@haneberg.com</a>.

The deadlines are coming up fast. Below is a list of deadlines and contacts

Dec. 3, 2001 Field trip proposals due. Contact Eric Erslev at erslev@cnr.colostate.edu or (970) 491-5661.

Dec. 3, 2001 Short course proposals due. Contact Edna Collis at ecollis@geosociety.org or (303) 357-1034 for guidelines for submitting a short course proposal.

Jan. 17, 2002 Proposals for Topical Sessions or Pardee Keynote Symposia due by midnight, Mountain Standard Time. Electronic submission required. Proposal forms are now available at www.geosociety.org

July 16, 2002 Abstracts due by midnight, Mountain Daylight Time.

#### **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 to a larger spread. Prices will start as low as \$50 for both newsletter and website exposure. If you are interested, contact Ed Friend <a href="webmaster@aegrms.org">webmaster@aegrms.org</a> or Kristi McQuiddy <a href="message-newsletter@aegrms.org">newsletter@aegrms.org</a>.

### **Section News**

- 1. Alyssa Kohlman is actively seeking speakers for the CSM Student Section. Please contact her at <a href="mailto:alyssakohlman@hotmail.com">alyssakohlman@hotmail.com</a> if you are interested in sharing your knowledge and experience.
- 2. Please forward any newsworthy items to Kristi McQuiddy <a href="mailto:newsletter@aegrms.org">newsletter@aegrms.org</a>.
- 3. Please forward any webworthy items to Ed Friend at <a href="webmaster@aegrms.org">webmaster@aegrms.org</a>. The website is located at <a href="http://www.aegrms.org">http://www.aegrms.org</a>.

#### **RMS Officer Contact List**

Chairperson	Tim Petz, Church & Associates, Inc., 303.463.9317, <a href="mailto:chair@aegrms.org">chair@aegrms.org</a>
Chair-elect	Jim Wright, GEI Consultants, Inc., 303.662.0100, <a href="mailto:chair-elect@aegrms.org">chair-elect@aegrms.org</a>
Secretary	Scott Walker, GEI Consultants, Inc., 303.662.0100, secretary@aegrms.org
Treasurer	Matt Bensen, Micro Geophysics, 303.424.0499, treasurer@aegrms.org
Membership	Scott Walker, GEI Consultants, Inc., 303.662.0100, <a href="mailto:membership@aegrms.org">membership@aegrms.org</a>
Newsletter	Kristi McQuiddy, GEI Consultants, Inc., 303.662.0100, newsletter@aegrms.org
Website	Ed Friend, GEI Consultants, Inc., 303.662.0100, webmaster@aegrms.org
Past Chair	Peggy Ganse, Haley & Aldrich, 303.534.5789, ext. 3210, pastchair@aegrms.org



#### CALL FOR PAPERS 2002 COLORADO GEOTECHNICAL SEMINAR

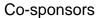
Geotechnical Engineering in Transportation – "More Than Just Lines on a Map."

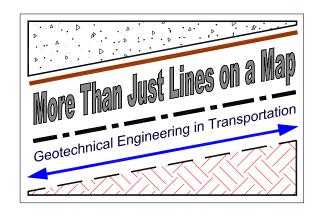
# Inverness Hotel, October 4, 2002 Denver, Colorado











The Geotechnical Group of the Colorado Section of the American Society of Civil Engineers has organized a one-day seminar on some aspect of geotechnology every other year since 1984. The Rocky Mountain Section of the Association of Engineering Geologists and the Colorado Association of Geotechnical Engineers will join us in organizing this event for 2002. The seminar is currently planned as a one-day event to be held on Friday October 4, 2002. The theme of the seminar will be "Geotechnical Engineering in Transportation – More Than Just Lines on a Map." The focus will be on geotechnical engineering analysis and design in transportation projects. Such projects may include: highways, runways, railways, subways, waterways, walkways, bikeways, bridges, tunnels, pipelines, utilities, conveyor systems, and related facilities.

The seminar planning committee is requesting individuals interested in presenting a paper to submit a brief (approximately 200-word) abstract by February 15, 2002. This abstract is informal for committee review, not for publication. Selected authors will then be **notified by March 8, 2002** and asked to submit an electronic or photo-ready copy of the paper by June 1, 2002. The papers will be published in the seminar proceedings and distributed at the conference. The ideal paper will focus on solving practical problems using innovative or non-traditional approaches, and will include discussions of both the theoretical and construction aspects of projects.

Potential topics for presentations include, but are not necessarily limited to, the following:

- Project planning
- Project delivery systems (design/build)
- Innovative field investigation techniques
- New laboratory testing methods
- New sources of data (e.g., electronic media, Internet, etc.)
- Innovative methods of analyzing or interpreting data to solve geotechnical problems in transportation
- Application of practical (not necessarily traditional) techniques in selecting design properties
- State-of-the-art technical approaches in geotechnical analysis and design
- Seismic studies and retrofitting
- Rehabilitation, redevelopment and reevaluation of old systems

- Innovative geotechnical construction methods such as those related to:
  - Subgrade soil stabilization/modification
  - Subgrade design and drainage/Innovative pavement designs
  - Use of geosynthetics/lightweight fills/reinforced fills
  - Landslide/hillside/rockfall mitigation
  - Surface and/or ground water control/interesting excavation methods
  - Bridge foundations, tunnel linings and stability
  - Ground anchors and tieback walls, micropiles, soil nails
  - Mechanically stabilized earth (MSE) walls
  - Structure protection and security/work in the urban environment
- Innovative construction monitoring techniques
- Environmental issues such as:
  - Wetland exchange
  - Reuse or redevelopment of contaminated sites (brownfields)
- Value engineering
- Risk quantification and failure analysis
- Structure maintenance
- Instrumentation and monitoring including practical approaches, data collection methods, and validating data and/or interpretation
- Case histories, focusing on one or more of the following:
  - Use of the Observational Method
  - Colorado/Rocky Mountain experience (DIA, T-REX, CDOT)
  - Demonstrations of the significance of data interpretation
  - Shortcomings in data gathering
  - What didn't work

Individuals offering to make a presentation should be prepared to speak for approximately 20 to 30 minutes, provide graphics during the presentation (Power-Point, slides, overheads, etc.), and provide in advance a written summary paper or previously published paper that can be reproduced as part of the seminar proceedings.

Please e-mail your abstract (MS-WORD format) by 5:00 pm Mountain time Febuary 15, 2002, to Jim Gill at <a href="mailto:contourengineer@aol.com">contourengineer@aol.com</a> or fax to at (303) 697-2655. With the abstract, please indicate your name, your role in the subject matter, your daytime telephone number, and your return fax number or e-mail address. Respondents should expect a reply from the planning committee by March 8, 2002. Photo-ready or electronic (preferred) copies of the reports will be due by June 1 and published in the seminar proceedings.

Thank you in advance for your interest.

