

The Engineering Geologist



THE
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OF AMERICA

NEWSLETTER OF THE ENGINEERING GEOLOGY DIVISION OF THE GEOLOGICAL SOCIETY OF AMERICA

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CHAIRMAN'S MESSAGE

Some years ago when I became a dues-paying member of the Engineering Geology Division, I attended Engineering Geology sessions at GSA meetings to learn what was going on in the world where the science and theories of geology met the human needs of the planet and to see what the planet's populace was doing to its surroundings, for better or worse. These ideas were brought into my teaching of undergraduate students to sharpen their understanding of earth processes and their relation to the human condition. Little did I dream then that the opportunity would present itself to serve the Division as an officer and thus to repay the efforts of those who foresaw the need for the Division and others who have maintained its important role in GSA. Surficial processes and their impact upon the populace and the impact of mankind upon surficial processes together with the understanding of how past geologic processes have affected materials which we encounter as we build in and on the earth are key elements in what Engineering Geology is all about.



Today the understanding of some of these relationships and passage of the ideas about them to the general populace might be called "Environmental Geology"; however, I take the view that they are part of the spectrum of Engineering Geology and that it is the responsibility of the Division to see that the results of good science are brought to bear upon the problems facing us. There are many avenues by which we collectively and individually can contribute. The officers of the Division will be developing additional opportunities for the membership to contribute during the coming year, laying a foundation which we hope will provide each of you something of value in the year and years to come.

A Long-Range Plan statement for the Division was submitted to the GSA Council in April 1991; Chris Mathewson, his committee, and the members of the Management Board are reviewing it and planning on updating it sometime the spring. At the core of the plan is the expansion of the Division's traditional role in education of its members and friends and the acceptance of an important role in the program of the Institute for Environmental Education (IEE) Studies. It was decided at the Management Board meeting in San Diego that the liaison committee with the IEE would consist of the chairman-elect of the Division, the Secretary, and two others appointed by the Chairman. For the immediate next two meetings these people will come from the Cincinnati and Boston areas, respectively.

Issues that will have to be addressed during the coming year include the question of whether the Division should change its name to "Engineering and Environmental Geology Division"; whether or not the Division believes a new GSA journal specializing in "applied and environmental geology" is required or whether *Geology* and the *Bulletin* should continue to serve as the outlet for all journal-type publications of the Society; how best to broaden the education responsibilities of the Division to its members and to the world-at-large, including its role in the Institute for Environmental Education and other GSA public education thrusts; and how best to develop a Division presence in the GSA section programs.

The Publications Committee, with Rick Giardino taking the lead, is moving forward on new volumes for *Reviews in Engineering Geology* and the Management Board is interested in receiving proposals for either additional *Reviews* volumes or new *Case Histories* volumes. These two publication series provide a forum whereby the Division makes important contributions to the science aspects of Engineering Geology. A volume could grow out of a symposium or theme session put on at one of the GSA section meetings.

Standing Committees have been appointed; see the listing elsewhere in the newsletter. There undoubtedly will be a number of short-term, single purpose, *ad hoc* committees needed. I hope that when you are called to serve, you will participate. One such committee has been appointed to help Dick Gray, U. S. National Committee for IAEG representative, investigate the whats and wherefores of a proposed IAEG meeting in 1998 in the U. S. Tom Holzer (USGS) and Bob Sydnor (California Division of Mines and Geology) have accepted this responsibility. Perry Rahn, by virtue of an earlier appointment, will work with Dick on the long-range aspects of any possible proposal.

Attempts are being made to develop an EGD presence at the GSA section meetings through contacts with the technical program chairman and by soliciting members of the EGD to organize a session that is clearly identified with the EGD. We need not hide our candle under the proverbial bushel; at the same time, we need to make our presence felt by providing a program that is of tangible value to other attendees at the section meetings. I am looking for a few more volunteers who want to help with this aspect of the Division's program. It is also planned to have a member of the Management Board present at section meetings to discuss with interested attendees the nature and program of the EGD. The first section to participate in this program is the Southeastern Section where a clearly identified Engineering Geology session is scheduled.

"There are many avenues by which we collectively and individually can contribute."

Jerry DeGraff is organizing an interesting program for the Cincinnati meeting; one important aspect is a field trip for junior and senior high school teachers to be led by Bill Haneberg. Other aspects of the proposed program can be found elsewhere in the newsletter. Rhea Graham is beginning the preliminary development of the Boston program in 1993. John Rockaway has accepted the responsibility of developing contacts for news, personal notes for the newsletter from the various GSA sections. His appointment represents an attempt to broaden the scope of the newsletter and to provide assistance in its production to the editor, Rick Giardino. In the long run, what you find in the newsletter is what you make available to the editor. So if you want to help, please contact either John or Rick.

Finally, this is an exciting time for those of us interested in the widening of the engineering geology horizons; won't you join in and invite others of like interest to participate?

Charles W. Welby, Chairman



*Photograph of the current EGD officers
Charles Welby, Perry Rahn, Rhea Graham, Jeffrey Keaton, Jerry DeGraff*

U. S. COMMITTEE

for:

International Association of Engineering Geology

The U. S. Committee for IAEG is a subcommittee of the U. S. Committee on Geology that functions under the Board on Earth Sciences of the National Academy of Sciences. A membership form has been created below for your use.

The role of the U. S. Committee for the International Association of Engineering Geology (USC/AIEG) is to provide a linkage between the profession in the United States and in other countries. IAEG now consists of 57 national groups. Through publication of the IAEG *Bulletin* and the EG Newsletter, members in the U. S. are informed of engineering geological activities worldwide. Through sponsorship of speciality conferences and international congresses and symposia, a network of worldwide communication is achieved on important engineering geology topics. The next Congress is scheduled for Lisbon in 1994. The recent addition of an Editorial Board to the *Bulletin* qualifies it as a refereed journal.

GSA ENGINEERING GEOLOGY STUDENT RESEARCH AWARD

KEVIN R. HAYES "A STUDY OF FRACTURE SYSTEMS AND FOSSIL STRESS IN THE ALLEGHENY PLATEAU NEAR EBENSBURG, PENNSYLVANIA"

The Management Board of the Engineering Geology Division of the Geological Society of America announced in May 1991 that Kevin R. Hayes (Pennsylvania State University) was selected to receive the Second GSA Engineering Geology Student Research Award. Mr. Hayes was awarded \$1,200 as part of the research grant program, and this award honored Kevin as the outstanding student in engineering geology.

Students are advised that this award exists and are encouraged to submit applications prior to February 15, 1992. Forms are available on request from the GSA, Boulder.

CORRECTED BIOGRAPHICAL SKETCH

Several errors were made on the biographical sketch in the last issue of this newsletter. The corrected biographical sketch for Rhea Graham is entered below. Editor.

Secretary-Treasurer

Rhea Lydia Graham was born in 1952 in Terre Haute IN. She received an A.B. in Geology at Bryn Mawr College in 1974, an M.A. in Oceanography at Oregon State University 1977. A registered geologist and engineering geologist in Oregon, she is also a registered environmental assessor in the State of California, and a certified professional geologist in Indiana. Her current employment is Director of the New Mexico Mining & Minerals Division (1991-present). Other positions she has held include Senior Scientist with Science Applications International Corporation 1988-1991; Regulatory Compliance Specialist, Ponderosa Products, Inc., and private consultant in RCRA Compliance 1988; Manager, Environmental Sciences, DEUEL & Assoc. in 1987-1988; Senior Engineering Geologist, DEUEL & Associates, 1985-1987 in Albuquerque, NM. She has worked as geologist, Forestry Sciences Laboratory and private consultant in engineering geology from 1983-1984 in Corvallis OR; as an engineering geologist for CH2M Hill; 1978-1983 in Portland, OR, and Geophysicist for EXXON 1977-78 in Houston TX. Her professional society memberships include: Geological Society of America, Association of Engineering Geologists, New Mexico Geological Society and AIPG. She is a Past-President of the New Mexico Section of AIPG, and has served on the NRC/NAS Committee on Ground Failure Hazards.

OF INTEREST

Title: Landslides in Portland Metropolitan Area
When: May 10, 1992, 8-5 p.m.

The Cordilleran Section of the GSA is having a landslide field trip prior to their meeting May 11-13, 1992. Abstracts are due 21 January.

This field trip is billed as an "Environmental Geology" trip and would be of interest to most of the members of the Engineering Geology Section.

MEMBERSHIP IN THE INTERNATIONAL ASSOCIATION OF ENGINEERING GEOLOGY

The U. S. Committee for IAEG represents U. S. interests in the international group and serves as a liaison. Membership in the U. S. Committee for IAEG and IAEG costs \$18/year and includes the *Bulletin* and periodic newsletters on worldwide activities in engineering geology.

If you are interested, please complete this form, make check payable to the U. S. Committee for IAEG, and send it to Roger Ilsley, STS Consultants, Ltd., 11425 West Lake Drive, Milwaukee, Wisconsin 53224.

MEMBERSHIP IN THE INTERNATIONAL ASSOCIATION OF ENGINEERING GEOLOGY

The International Association of Engineering Geology invites you to become a member. The Association publishes a semiannual journal, *Bulletin of the International Association of Engineering Geology*, and sponsors field excursions and symposia on timely topics worldwide. The recent addition of an editorial board to the *Bulletin* qualifies it as a "refereed journal."

Annual dues are \$18.00 U.S., payable to the U.S. Committee for IAEG. If interested, please complete the membership form below.

Block letters, please

Last name _____

First name _____

Address _____

The following are optional:

Date & place of birth _____

Title _____

Function _____

Bulletin will be sent to address specified above

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E. B. BURWELL, JR. MEMORIAL AWARD

CALL FOR NOMINATIONS

This annual award is given to author(s) for a paper published within the past five years that advances knowledge concerning principles or the practice of engineering geology, or of related fields of applied soil or rock mechanics where the role of geology is emphasized. There is no restriction as to the publisher or publishing agency of such a paper. The author or authors need not be a member nor members of the Engineering Geology Division or of GSA and need not be residents nor citizens of the United States.

Deadline for nominations to be submitted to the committee is March 1, 1992. Nominations should be sent to :

Wayne C. Isphording
Department of Geology
University of South Alabama
Mobile AL 36688.

FIELDTRIPS of INTEREST TO EGD

During the Ogden, Utah meeting May 13-15, 1992:

- 1) Quaternary volcanism, tectonics, and sedimentation in the Idaho National Engineering Laboratory.
- 2) Engineering geology and geologic hazards of the Ogden area.
- 3) Quaternary geology and geologic hazards of Tooele, Utah and Northern Rush Valleys, Utah

NEWS ITEM

Ellis L. Krinitzsky, Jahns Distinguished Lecturer for 1991-92, has chosen "Expert Opinion and the Probability of Earthquakes" as his lecture topic. He reports that he spoke at the University of Washington in May where his talk was sponsored by ASCE and AEG. In September he talked at Memphis State and at St. Louis University. In October his trip was sponsored by the Colorado School of Mines. In addition to these talks, he also made formal presentations at the U. S. Army Corps of Engineers in Washington, D. C. and Vicksburg, Mississippi, the U. S. Geological Survey in Menlo Park, California, and the AEG in Denver, Colorado. Krinitzsky reports that he is editing his lecture and hopes to have the manuscript ready for publication in about six months.

OUTSTANDING STUDENT RESEARCH

The Engineering Geology Division has a fund for the AAOSR which has a balance of \$5,000. The GSA Foundation Board of Trustees has approved a policy that \$5,000 is required to establish a named, designated fund and, further, that the fund should grow to \$10,000 by January 1992 to retain its restricted designation because of the time and cost required to administer the funds. The Foundation has offered to match fifty cents of every new dollar raised until a \$10,000 fund balance is reached.

This opportunity is quite attractive, and the Division should take advantage of it. Here is a chance to support students in environmental and engineering geology research. Donations should be made to GSA Foundation and designated for the Engineering Geology Division Anniversary Award for Outstanding Student Research.

Thank you for your support of this worthwhile activity!

Perry H. Rahn, Past Chairman, EGD

LIFE'S EMBARRASSING MOMENTS

In the last issue of the GSA Newsletter I made a plea for volunteers to help with various activities of the Division, to create a list of names that might be called upon from time to time. I received several letters in response to this plea. However, somewhere between my initial request and the response to the letters, the correspondence has disappeared. So if those of you who did respond would send me a copy of your letter, I would greatly appreciate it. You haven't been forgotten, just lost. If you did not happen to respond to those earlier calls for volunteers, now is the time. We are going to be busy in the next couple of years!!

Charles W. Welby
EGD Chairman

EDITOR'S NOTE

In an earlier issue of the *Newsletter*, I noted I had received numerous requests from individuals around the country who are teaching engineering geology or geomorphology who would like to have copies of slides or photographs directly related to engineering geology. I volunteered as coordinator for the Photo Exchange.

I have not heard from many people since that announcement appeared. Please, if you are interested, contact me, and I will try to put you in touch with others who are interested. My phone number is 409/845-7141, my FAX is 409/845-0056.

WHAT THE MEMBERS ARE SAYING

SUBJECT: Krinitzsky's "Faults in the System"

Krinitzsky hit the nail on the head (but he also hit his thumb) in the last paragraph of his letter in the August 1991 issue of *The Engineering Geologist*, warning against the recommendations of Greg Hempen for the AEG in the Hempen letter to the *Oakland Tribune* (see its August 5, 1990 issue) as reported in the February 1991 issue of *The Engineering Geologist* on page 6.

For dealing with wrong doing in our profession, Hempen had recommended a paid peer-review committee of geologic experts, to rule on some of the claims against professionals, as a means of helping the California Board of Registration for Geologists and Geophysicists speed up its process, which in some cases took years. Krinitzsky reasoned correctly:

1. that a peer-review committee could not be depended on to be impartial;
2. that legal guidance is essential; and
3. that there should be no tampering with the rules of procedure simply for expediency in shortening the time involved in handling the complaint.

Allen F. Agnew
33125 White Oak Road #24
Corvallis, Oregon 97333

FUTURE SHORT COURSES

BIOREMEDIATION OF HAZARDOUS ORGANIC CHEMICALS IN SOIL AND GROUNDWATER

January 27-28, 1992, St. Louis, Missouri.

Information: Walter L. Ries, Continuing Education, 119 Mechanical Engineering Annex, University of Missouri-Rolla, Rolla, MO 65401-0249, phone: (314) 341-4132 or 1-800-752-5057, fax 314-341-4992.

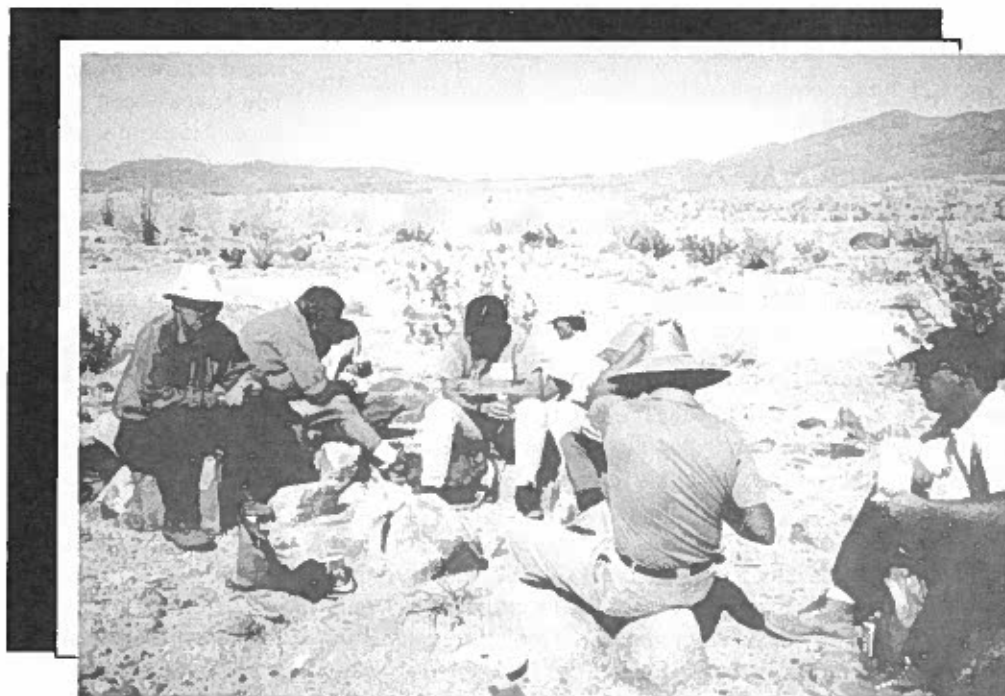
16TH ANNUAL FUNDAMENTALS OF DEEP FOUNDATIONS (ANALYSIS, DESIGN, TESTING, AND INSPECTION)

March 2-6, 1992, Cocoa Beach, Florida.

Information: Walter L. Ries, Continuing Education, 119 Mechanical Engineering Annex, University of Missouri—Rolla, Rolla, MO 65401-0249, phone: (314) 341-4132 or 1-800-752-5057, fax 314-341-4992.

24TH ANNUAL FUNDAMENTALS OF SHALLOW FOUNDATION DESIGN (INCLUDING STRUCTURAL DESIGN OF FOOTINGS)

February 3-8, 1992, Scottsdale, Arizona. Information: Walter L. Ries, Continuing Education, 119 Mechanical Engineering Annex, University of Missouri—Rolla, Rolla, MO 65401-0249, phone: (314) 341-4132 or 1-800-752-5057, fax 314-341-4992.



Megaslide fieldtrip EGD, Mike Hart & Daryl Streiff leaders - lunch stop