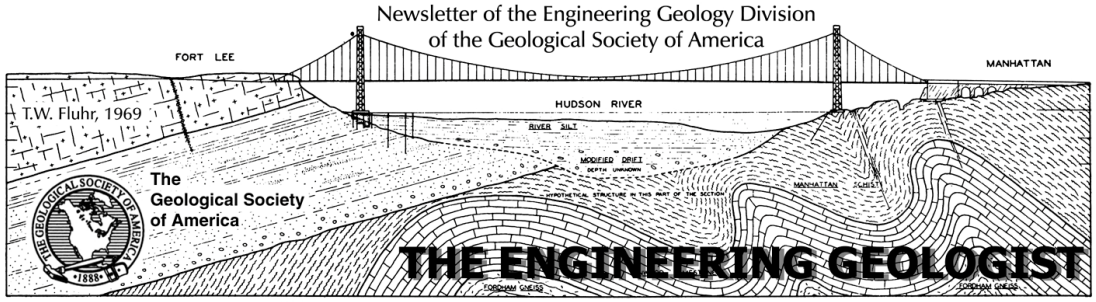
Newsletter of the Engineering Geology Division
of the Geological Society of America



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MESSAGE FROM THE CHAIR

Robert H. Fakundiny

The new business year started with the transfer of the Berkey Gavel from Bill Haneberg to me at the Awards Luncheon during the meetings of the Geological Society of America in Denver last November. The Engineering Geology Division has a lot to do this year to maintain its viability and to further the profession of engineering geology. First, let me express my pleasure and honor to be your Chair for 2005. I know from past experience as chair of various geological groups that the most effective way for the Management Board to operate is to work closely with the members of the Division and to heed their advice. The other side of the process, though, is that the membership has to actively participate also in the Board's functions. Therefore, I am calling for your participation and wisdom in guiding this year's work.

The major duties to which the Management Board must respond this year include: (1) establishing more engineering-geology presentations at the National and Sectional meetings of GSA than last year; (2) promoting the Richard Jahns Lectureship, Roy J. Shlemon scholarships, and E. B. Burwell, Jr. Award; (3) ensuring the success of the annual Awards Luncheon at GSA; and (4) working with the GSA Committee on Applied Geology to make the geological profession more visible and useful to the Nation.

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The success of promoting our work in engineering geology in presentations at GSA meetings does not happen automatically. We continue to seek out papers for topical sessions and symposia, and to create short courses that emphasize the critical need for engineering geology in our daily lives as well as for the support of governmental projects. We also encourage members to lead engineering geology field trips at the National and sectional meetings. The Management Board will be working with the new GSA Section on Applied Geology to cosponsor sessions at the coming national GSA meeting in Salt Lake City. The Management Board suggests topics such as hydrocompaction of soils; inter-mountain seismicity; arid and semi-arid geotechnical issues; effects of drought; arsenic in basins; and non-point source pollution. Other topics might include engineering geology in support of national security; engineering geology in the revitalization of streams, lakes, and coastal waters; engineering geology of transportation systems; engineering geology in the mitigation of geologic hazards; and engineering geology in space. You can come up with many more and better themes. This must all be done in the next few days because topical session proposals are due at GSA Headquarters by January 11.

I can report about our budget, paraphrasing in a similar fashion to that from Bill Haneberg's message in the February, 2004 Newsletter, our budget is in good shape, with a balance of about $12,000, which is carried over from last year. Our dues remain the lowest of any GSA division. Lately we have had to use some of this surplus to cover shortfalls in the Jahns Lectureship and Shlemon Scholarship Funds because interest

Jeff Keaton, 2004 Richard H. Jahns Distinguished Lecturer, making his presentation at the GSA annual meeting in Denver.

income has not been great enough to cover the expenses of these programs. Our annual expenditures include award plaques and banquet tickets, expenses for the mid-year division chairs meeting held in Boulder, printing and mailing paper newsletters and ballots to members who won't or can't receive email, and new student initiatives.

We constantly are searching for volunteers for the Richard Jahns Distinguished Lecturer program and candidates for Roy J. Shlemon Scholarships. Volunteers and nominations are welcome by the deadline of March 1. The E. B. Burwell, Jr. Award goes to the leading publication on Engineering Geology for the year. The deadline for nominations for candidate publications is February 1. The Distinguished Practice and Meritorious Service Award nominations are due by March 1 also. We also endorse the John C. Frye Environmental Geology Award, which is given for an outstanding environmental geology paper published by either GSA or the state geological surveys.

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The annual Awards Luncheon needs much more active participation by students than in the last couple of meetings. The Management Board is working on ways of attracting students to the luncheon and some other event that might produce a useful and congenial contact with us seasoned practitioners. Sections might suggest methods of supporting student travel and presentation of student work at the national meeting. The Management Board will be working to obtain financial support for these efforts. I will discuss this idea with other societies of the American Geological Institute to seek ways of coordinating with student chapters of the other societies. The auspices of AGI may be the avenue for cooperation among the geological profession to increase the interest of students in geology, and especially engineering geology.

EGD luncheon camaraderie

Two new items have come to the attention of the Management Board and were discussed at the annual business meeting: sponsorships for Division programs, and the issue of public access to scientific papers that are sponsored by governmental grants or contracts. GSA has opened the possibility that Divisions may seek outside sponsorship for their programs. The process must be coordinated closely with the GSA Foundation to avoid potential sponsors being "shotgunned" by the membership. Nevertheless, outside sponsorship could: (1) support increased student participation in national meeting sessions; (2) support the Jahns Lectureship and Shlemon Scholarships; (3) support student attendance at the annual awards luncheon; and (4) provide an informal chat session with students at a special gathering at the annual GSA meeting.

Language regarding open access through the internet to the public of scientific publications was attached to the National Institute of Health funding bill this last year. This language would require that all NIH-sponsored research papers be made available to the public by electronic mail within six months after the original publication. The process has implications for peer review, sales of publications, and copyrights, among other issues. Many of us fear that this process might be extended to all federally funded research, including that supported by the National Science Foundation and various other agencies and departments. The concept has merit, but since it might greatly affect the publishing of research by the Engineering Geology Division, it needs to be studied and debated. We will be watching the progress of this program and attempt to provide insights from the membership of GSA to Congress.

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Again, I urge each of you to contact me, or one of the other Management Board members, or GSA Headquarters, with suggestions on how the Engineering Geology Division can become most beneficial to you. Please ask your colleagues to join the Division and promote the profession of Engineering Geology. I thank you in advance for your support. You have an excellent Management Board to carry forth your proposals. Please use it.

Award Nominations Needed

Like all deadlines, March 1, 2005, will be upon us sooner than we think (or would like)! Please consider making a nomination of a valued colleague, co-worker, former teacher or someone who has made a positive impression on you for one of the Engineering Geology Division awards. These include:

Distinguished Practice Award is given to an individual in recognition for their outstanding contributions to the technical and/or professional stature of engineering geology. A nomination usually includes a statement detailing these contributions and the nominee's resume. The nominee need not be a member of the Division.

Meritorious Service Award provides a means to recognize a Division member for their outstanding efforts on behalf of the Division. A brief description of the nominee's contributions to the Division serves to place a person's name in nomination for this award.

Also, consider making a nomination for the Richard H. Jahns Distinguished Lectureship. Established jointly between the Division and the Association of Engineering Geologists, it commemorates Dr. Jahn's distinguished career and promotes student awareness of engineering geology through a series of annual lectures at academic institutions.

The Engineering Geology Division website hosts a listing of past recipients of both these awards and additional information on submitting a nomination. Please send nominations to Robert H. Fakundiny at rfakundi@mail.nysed.gov by March 1, 2005.

Environmental & Engineering Geosciences Article Receives Burwell Recognition

Each year since 1969 the Engineering Geology Division has conferred its highest honor, the E.B. Burwell, Jr. award, upon the authors of an outstanding recent publication in engineering geology or a closely related field. Previous awards have been made to the authors of textbooks, professional reference books, technical monographs, papers published in various scientific journals, and a host of other publication. All have been outstanding contributions to the science and profession of geology, and the list of Burwell award winning authors reads like a veritable who's who of modern engineering geology. This year I am pleased to present the 2004 E.B. Burwell, Jr. award to John W. Bell, Falk Amelung, Alan R. Ramelli, and Geoff Blewitt for their paper "Land Subsidence in Las Vegas, Nevada, 1935 -2000: New Geodetic Data Show Evolution, Revised Spatial Patterns, and Reduced Rates", which was published in the August 2002 issue of *Environmental & Engineering Geoscience*.

In their award winning paper, John, Falk, Alan, and Geoff synthesized stratigraphic, structural, geomorphic, geodetic, and remote sensing data collected over seven decades to produce an uncommonly detailed understanding of land subsidence in one of our

country's most rapidly growing urban areas. Doing scientifically sound work with practical implications, as these authors surely have, is the essence of good engineering geology. They showed how modern techniques such satellite radar interferometry, also known as InSAR, and GPS geodesy can be integrated with traditional geologic maps and borehole logs to provide unprecedented understanding of the actively deforming sediments upon which sit more than a million people and billions of dollars of real estate. They also illustrated— to my particular fascination— how faults in poorly lithified basin-fill sediments can act as hydrogeologic barriers that control the geographic patterns of land subsidence to an extent not previously recognized in the engineering geologic literature. The important implication is that the areas of greatest subsidence do not necessarily coincide with groundwater pumping centers. Their detailed maps and measurements further document that artificial recharge can be used to significantly reduce land subsidence rates. Although theirs is not the first paper to describe the use of GPS and InSAR to study land subsidence, it is certainly one of the most comprehensive and readable syntheses of conventional geodetic data, satellite geodetic data, and Quaternary geologic information collected over several decades.

John Bell accepting the E.B. Burwell, Jr. Award on behalf of himself and his co-authors.

Finally, there are two other reasons why I am pleased to be presenting this award to John, Falk, Alan, and Geoff. First, theirs is the first Burwell award winning paper to be published in *Environmental & Engineering Geosciences*, which is published jointly by GSA and the Association of Engineering Geologists. As a member of its editorial policy board, I congratulate the four authors and thank them for submitting their manuscript to *Environmental & Engineering Geosciences*.

Second, this year's award winning paper shows the kind of first-rate science that can be done by state geological surveys. State surveys are almost always under-funded, typically under-staffed, and, unfortunately, often under-respected by geologists, politicians, and taxpayers. Having spent an appreciable portion of my career working for a state geological survey, I know that they can and do foster an incredible amount of first-rate applied geology that is directly applicable to the solution of real problems. Therefore, it is fitting to bestow an award for excellence in engineering geology upon a paper for which three of the four authors are state survey geologists.

John, Falk, Alan, and Geoff, please accept the 2004 E.B. Burwell, Jr. award with my congratulations and admiration.

(Citation written and presented by William Haneberg, Haneberg Geoscience)

2004-2005 Engineering Geology Division Management Board

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EGD management board members (from left to right): Bill Haneberg, Sue Cannon, Paul Santi, and Robert Fakundiny. Not pictured is Syed Hasan.

DeGraff Awarded Distinguished Practice Award for 2004

I am pleased to present the 2004 Engineering Geology Division Distinguished Practice Award. As many of you know, this year's recipient is Jerry DeGraff, and I think that all of you who know Jerry will agree that there no one is more deserving of this award.

The Distinguished Practice Award recognizes outstanding individuals for their continuing contributions to the technical and/or professional stature of engineering geology. In other words, this award recognizes a person who, in the course their career, has made a significance impact to the engineering geology community, and society in general, by skillfully applying engineering principals and sharing their expertise through publishing, teaching, and volunteering. And in doing so, help communities identify, analyze, and take steps to reduce the risk of geologic hazards that prevent or, at least, minimize damage and fatalities.

Jerry DeGraff (holding citation plaque) with Alan Gallegos

Jerry's contribution to the engineering geology profession is truly outstanding and epitomizes the spirit of this award. His distinguished career at the U.S. Forest Service spans more than a quarter century, working mostly on the Sierra, Sequoia, and Stanislaus National Forests in California. There, Jerry serves as lead geologist in which he is often a member of either a multi-disciplinary or an interdisciplinary team that addresses the geologic aspects of natural hazard reduction, watershed protection, groundwater protection, and hazardous waste remediation. This includes the Forest Service Burned Area Emergency Response or BAER teams to rapidly assess recently burned areas for potential debris flow hazards and watershed protection. As the result of his years of work on the forest, Jerry has honed his skills and is recognized as an expert in landslide hazard mapping and analysis. Not only has his talents on the forest been recognized, but his talents has been exported overseas many times. Jerry has been tapped by the Organizations of American States, Office of Disaster Assistance, and U.S. Agency for International Development to serve as a technical consultant in Jamaica, Dominica, St. Lucia, and Thailand to assess landslide hazards in the wake hurricanes, landslide-dam disasters, and disaster mitigation and resources restoration. He has also helped in preparing landslide monitoring plans for Puerto Rico, evaluates short-term predictability of landslide hazard maps (and the relationship of landslide activity to vegetation types) in Dominica, and served on the wildfire technical assessment team to Bulgaria and Greece as a burn rehabilitation specialists.

I truly believe that Jerry loves to share with others his wonder of science, and specifically geology. If any of you have had the opportunity to talk to Jerry or attend one of his short courses or been in the field with him, you know what I mean. He is enthusiastic and very knowledgeable, which is evident in his publications and teaching. Jerry is a prolific writer. He has authored, co-authored, and co-edited 8 books and book chapters;

authored or co-authored more than 45 technical publications, journal articles, and proceeding papers; and presented more than 25 abstracts at professional geologic meetings.

Teaching has long been an important part of his career. Jerry began teaching in 1967 as a Jr. High science teacher in New York. Since that early beginning, Jerry has taught courses at the Strasenburgh Planetarium in New York, Utah State University, and Fresno State University. He has also taught engineering geology-related short courses for the U.S. Forest, Organization of American States, U.S. Geological Survey, and Geological Society of America in Arizona, Arkansas, California, Colorado, Massachusetts, and Ohio; as well in Bulgaria, Guatemala, Italy, and Jamaica. In addition to teaching, Jerry maintains his academic sharpness through post-graduate and continuing education courses from universities in California, Idaho, Wisconsin, and New York.

Jerry is a Fellow of the Geological Society of America and a member of the Society's Engineering Geology Division, Quaternary and Geomorphology Division, and Cordilleran Section. He is a member of the Association of Engineering Geologists and member of the International Association of Engineering Geologists. Jerry actively participates in these organizations. He served on many committees for these organizations as well as the National Research Council/National Academy of Sciences. He has served as Chair of the GSA's Engineering Geology Division and Chair of the Geology and Public Policy Committee, Cordilleran Section of the GSA. Jerry is currently a member of the Editorial Advisory Board for Landslide and is the current Newsletter Editor for the Engineering Geology Division (GSA).

As you can see, Jerry has been quite busy; and in the course of this work, Jerry has helped many people, has made many friends, and is recognized by many around the world.

(Citation written by Douglas Sprinkel, Utah Geological Survey and presented by Alan Gallegos, USDA Forest Service)

So Many Professional Meetings; So Little Time

There are many more interesting meetings, conferences, and field sessions taking place each year than we can afford to attend. We go to the ones we can and hope we have not missed a really good one. Everyone would benefit knowing more about sessions that they were unable to attend. So future issues of **The Engineering Geologist** will gladly include brief meeting reviews. The success of this effort will depend on members sending a note (in MS Word or rich text format) to the editor, Jerry DeGraff, at 45nyutca@sbcglobal.net.

It is impossible to include the benefits of networking and informal discussions that occurred at a meeting. But it's helpful to know: **1)** if any proceedings or other published material are available and how to obtain it, **2)** key findings/themes, participants or sponsoring organizations, and **3)** are there future meetings planned as well as where and when they will take place. Hope to hear from you soon!

Division's Meritorious Service Award Given to Cronin

It is my honor and privilege today to present Dr. Vincent S. Cronin with our Meritorious Service Award for his outstanding service to the Division. Vince, whose service began in 1994 and continues today, is our 15th recipient of the award.

Vince has been my friend and professional colleague for 22 years and is one of those responsible for pulling me into the Division. We met at Jim Slosson's office in the 1982 just a couple of years after we both graduated from schools in southern California. Jim was and is our mentor and set a very high standard of professionalism for us to follow, so it is no surprise we both ended up working for the Division at the same time.

Let me tell you about Vince's accomplishments. His most important one is his marriage to a geologist, Cindy, who keeps him on the straight and narrow. His curriculum vita runs for 14 pages, in small type, so I will have to paraphrase a little. Vince earned his bachelor's degree from Pomona College in southern California and was a field assistant of the late, great, A.O. Woodford. He moved onto Dartmouth College for his Master's degree and completed stratigraphic analysis of the Skardu Basin in northern Pakistan of all places. Vince is still working in Pakistan studying slope stability. Following his east coast adventures, he jumped to the middle of world and became an Aggie, writing his doctoral dissertation on Cycloid Tectonics. I still haven't figured out what cyclones have to do with plate motion, but perhaps we can persuade Vince to educate us. He got a job at the University of Wisconsin-Milwaukee and was promoted from Assistant to Associate Professor. His students joined EGD and a few of them received Shlemon Awards. Recently he moved back to Texas where he is currently an Associate Professor of Structural Geology at Baylor University. On his way through graduate school he became a National Merit Scholar and was rewarded with several distinguished scholarships for his excellent work.

Rob Larson presents the Meritorious Service plaque to Vince Cronin (on right),

So far he has directed six students through their Master's degree and served on another 18 Master's and Doctoral committees. Personally, he has published 21 peer-reviewed papers and 57 abstracts, but only managed to complete three books so far. He maintains membership in six professional organizations and was elected a Fellow of the Geological Society of America last year. In the consulting world he has written thirty major reports and is a licensed Professional Geologist in Texas and Wisconsin. He brings the best experience

from both worlds, academic and consulting, to his students. If you want to know how good a teacher is, you talk to their students. Vince's students rave about him. His abilities were recognized more formally when he received the Martine D. Meyer Excellence in Undergraduate Teaching Award in 2001.

Vince became involved with the Engineering Geology Division in 1994. He worked his way through the ranks and was chair in 1998. He organized the EGD program at the 1997 Annual meeting that included our Division's 50th Anniversary Symposium which he convened. He did his tour of duty on the Joint Technical Program Committee as well as chairing Division theme sessions. He recognized the problem of institutional memory loss all organizations have, but came up with a solution. Our bylaws allow the Secretary to serve multiple years. Vince's idea was to reorder the ascension of officers so that a Past-Chair would then serve as Secretary for three years, thus serving as the Division's memory. He was going to be the first past-chair to serve in this capacity, but the life of a young professor working toward tenure got in the way. But this is all normal service for Division officers, and we are rewarding Vince today for his outstanding service. That service was and is his organizing, preparing, and manning our Division's booth at the annual meeting since 1996. Our Division has had the most recognizable, most organized, and most educational GSA Division advertising campaign at the GSA Annual Meetings, all because of Vince.

So on behalf of the members, I would like to thank Vince Cronin for his outstanding service to the Engineering Geology Division, and present him with the Meritorious Service Award.

(Citation written and presented by Robert A. Larson, Los Angeles County Department of Public Works)

Notices!!!

Annual Meeting Special Edition Coming!

In July, EGD members will receive the annual meeting special edition of **The Engineering Geologist**. With the 2005 GSA Annual Meeting in Salt Lake City so far in the future, it may seem premature to be thinking about the 2006 GSA Annual Meeting in Philadelphia. Annual meeting planning starts early. Deadlines for fieldtrips and technical sessions will be shortly after the New Year begins. EGD members are urged to consider ideas for Philadelphia and communicate them to the EGD management board members for consideration during the annual meeting in Salt Lake City.

Remember Jahns Lecturership!

Invite the **Richard H. Jahns Distinguished Lecturer,** Dr. Richard M. (Dick) Iverson to talk at your school or organization. Contact Dr. Iverson at riverson@usgs.gov or call (360) 993-8920. Additional details available at the EGD website at: http://rock.geosociety.org/egd/index.html.

Your Input is Needed!

GSA's Geology and Public Policy Committee is sponsoring panel discussions on "Professional Licensure and National Academic Accreditation" at the 2005 Northeast, Southeast, South-Central, and Cordilleran Section meetings. Panel dates, times, and locations to be announced.