

Message from the Chair

By Paul M. Santi

Thank you all for the opportunity to step into the role of Chair of this great Division. I had a fine example before me, in the form of Syed Hasan, and I plan to match his energy, responsiveness, and creativity. Of course, the real work gets done by dozens of you who volunteer to publish, edit, propose sessions, submit abstracts, and share your helpful ideas with the rest of us. Please keep doing so!

A number of months ago I was speaking with an individual who expressed genuine interest in the EGD and asked in a very positive way, "Well, why should I join?" I was at a loss for words for a few moments, as I couldn't think of a unique hook, but answered by stumbling through something about publications and meeting sessions. For weeks, this question haunted me: what do we provide our members that is of value to them? Well, I now have an answer, and it is no different from the answer I gave him, just expressed with more confidence:

- 1. We provide professional recognition in the form of our awards. If you haven't seen GSA's Hall of Honor at the last few meetings, you need to make a point to do so. Every one of our Division awardees has a large photo poster and biography honoring them in a very public setting. Peruse the list of past awardees on our website. You will recognize names all the way back into the Pleistocene. These awards mean a lot to people take some time to recommend a colleague.
- 2. We provide for transfer of knowledge in technical sessions. Our goal is to have enough sessions at each meeting than an EGD member can step from one EGD session to another throughout the meeting. It doesn't hurt to have a few hundred other sessions to choose from as well! Not finding enough that suit your fancy? Want to pull together several people to talk about similar interests? Propose a session! I confess that I have proposed sessions simply to ensure a venue to discuss my current research, I've proposed a session on a topic I knew I would be writing an NSF proposal on, and best of all, I organized a session on a topic I expected to be an expert witness for the following year. The bottom line was that I made the process work for me, and it benefitted a lot of other people as well.
- 3. We provide highly respected technical publications. The GSA "stamp of quality" automatically increases the exposure and availability of our Reviews in Engineering Geology volumes, which become valuable reference documents. At any one time there

are several in progress (I count five at the moment), but we are always receptive to ideas for new ones.

4. We provide a voice and a representation for engineering geology. As I have ramped up my involvement with the GSA over the last few years, I have been pleased to discover how important our division is to their staff and leadership. We are the first division, of course, but we are also active and consistent, and we represent an important, applied branch of the geosciences that validates the significance of geology as a science. GSA Headquarters has been willing to bend over backwards to help us, and we clearly have their attention, so please tell us your concerns and suggestions to relay to them. In a similar vein, we continue to sponsor and support various non-GSA meetings, and our logo carries weight to legitimize and promote these events.



What else? Our membership, 847 strong as of last fall, is the source of all good things. This body represents the brain-trust of engineering geology and can be tapped into for opinions, ideas, reviews, and maybe even a little elbow grease. Feel free to contact any of the Division officers if you have some ideas about using this resource!

Incoming Chair Paul Santi (left) accepts Berkey gavel from outgoing Chair Syed Hasan.

Apply Now for Shlemon Scholarships

One way the Engineering Geology Division helps our profession is through support for students undertaking research for their Masters or Doctoral degrees. The Shlemon scholarships can provide grants to up to four students; two in each advanced degree level. Applications must be postmarked on or before March 15, 2008 to Mr. Robert A. Larson, Chair, Shlemon Scholarship Award Committee. Instructions and the application form are available on the Engineering Geology Division website at http://rock.geosociety.org/egd/index.html. At the website, just 'click' on scholarships in the menu on the left panel. This will take you to the page starting with information on Shlemon meeting awards and followed by the information on Shlemon scholarships.

Present at the Engineering Geology Division luncheon during the Geological Society of America Annual Meeting in Denver were two awardees of scholarships for 2007. Certificates were presented to Joshua Theule and Rachel Pirot in recognition of their selection. Both are students pursuing Master's degrees at Portland State University.



Shlemon scholars Rachel Pirot and Joshua Theule with Shlemon scholarship awards committee chair, Robert A. Larson (on right).

Authors of "Mining and its Impact on the Environment" Recognized with E.B. Burwell, Jr. Award

Dr. Fred G. Bell and Dr. Laurence J. Donnelly are the 2007 recipients for their landmark book describing the interactions between mining activities and the environment in which they occur. Dr. Bell, of the British Geological Survey, is based in Keyworth, Nottingham, United Kingdom. His co-author, Dr. Donnelly, is an engineering and exploration geologist with Halcrow Group Limited. He is with their office in Handforth, Cheshire, United Kingdom. Dr. Donnelly was present to accept the award at the EGD luncheon held on October 29 during the Geological Society of America Annual Meeting in Denver.

This award was established in 1968 to honor Edward Burwell, Jr. who was both a founding member of this Division and the first Chief of the U.S. Army Corps of Engineers. It is given to the author or authors of a published paper of distinction that advances knowledge concerning principles or practice of engineering geology, or of related fields of applied soil or rock mechanics where the role of geology is emphasized. Dr. Hatheway's citation succinctly described how the recipient's book, "Mining and its Impact on the Environment" was most deserving of this recognition.

To date, 35 years into the Environmental Era, there has been no comprehensive, single-source summarization of the systematic nature of the geologically based

environmental impacts of mining. This book is long overdue and Bell and Donnelly, with their obvious qualifications, have built their assessment by explaining the physical processes of mining as they affect the environment of the host ground and of the ground upon the mineral process wastes are disposed. They accomplish this in ten chapters, each of which offers the reader a description of the situation and information related to appropriate environmental response. The authors complement one another in nature and breadth of experience. Bell is known for his outstanding command of the literature and of the properties of earth materials, while Donnelly has had a rigorous career of practice in geology applied to mining and so adds the dimension of environmental awareness upon the mining industry. The book is well illustrated with images of relevance to the text and with useful maps, vertical sections and drawings, along with appropriate references at the end of each chapter. The reader will be well served who makes use of the text to identify physical and chemical parameters and geologic influences that may be present for individual projects. A special benefit of the book will be to help identify and tabulate special considerations for presentation in competitive consulting-project proposals, so that the reader will be able to show a special understanding to conduct geological planning or remediation in connection with mining.

Mining and its Impact on the Environment, 2006: Taylor & Francis Group, London and New York City, by Fred G. Bell and Laurance J. Donnelly, 547 p., hardbound ISBN 0-415-28644-1



Dr. Laurence J. Donnelly accepted the Burwell Award and gave brief remarks to the EGD members present for the awards ceremony following the EGD luncheon.

Engineering Geology Division Celebrates 60 Years

In 1947, the Engineering Geology Division became the first specialty Division within the Geological Society of America. During the 60 years since the establishment of the Engineering Geology Division, the number of Divisions has grown to seventeen with the 2007 approval of the Geoinformatics Division. The Engineering Geology Division has developed a strong program to serve both professional and student members. In addition to awards recognizing professional achievement and scholarship support for students, it also is the only Division with a specific book series, *Reviews in Engineering Geology*. With the ongoing help of Division members, it will continue to find ways to benefit its members.

The annual Division luncheon and awards ceremony provides both an opportunity to meet new colleagues and renew old acquaintances. It also represents a chance to meet the newly elected officers and discuss the State of the Division. At this year's luncheon, a short remembrance for recently deceased EGD member James Slosson was given by Vince Cronin. Several technical sessions at the annual meeting were organized in Dr. Slosson's honor. Contact information for the Division Officers shown below can be found at the EGD website at: http://rock.geosociety.org/egd/index.html.



2007-08 EGD Management Board (from L to R): Past-Chair Sayed E. Hasan, Chair Paul Santi, Vice-Chair Abdul Shakoor, Secretary J. David Rogers and Member-at-Large John Jens.

Other EGD Luncheon Images



David Noe reading the Distinguished Practice Award citation for William "Pat" Rogers.

Vince Cronin recalling some of Jim Slosson's keys to good engineering geology practice.





Meeting Review: 1st North American Landslide Conference

Last June, Vail, CO was inundated with over 500 geologists, engineers, planners and other landslide aficionados for the 1st North American Landslide Conference. Despite the focus on landsliding in North America, 17 countries were represented among the attendees. Those arriving on Sunday, June 3rd were able to take advantage of three short courses.

Monday, Tuesday, Thursday and Friday mornings were scheduled with keynote and invited papers generally attended by most participants. Like the topic, these keynote and invited papers displayed the diverse aspects of landslides. Some representative keynote titles were: Landslides in the Panama Canal (J. Michael Duncan), Landslides and Society: Recognition, Impacts and Mitigation (Terry R. West), Mapping Landslides: Recent Developments in the Use of Digital Spatial Information (Cees van Westen), Submarine Slope Stability (Stephen G. Wright) and Seven Deadly Sins of Landslide Investigation, Analysis, and Design (Derek Cornforth). Equally interesting were the associated invited papers which ranged from technically focused presentations such a as Rock Fall Sheds—Application of Japanese Designs in North America (Duncan Wyllie) to the thought provoking Insurance, Climate Change, and Landslide Damage Mitigation: Thinking Outside the Shear Box (Jeffrey R. Keaton).

The afternoons on Monday, Tuesday and Wednesday were filled with four smaller topical sessions run concurrently. Those needing a break from sitting could see a number of interesting poster session available during the same time or visit the exhibitors' hall.

In keeping with the best traditions of geology, no presentations took place on Wednesday; everyone went on a field trip. Busloads of attendees spread out across central and western Colorado to examine particular landslides and their related geologic setting. Even the field trip to the wineries near Grand Junction focused on landslides along the way and the geology that makes Colorado wines what they are. Another memorable event was the first presentation of the Schuster Medal, a joint award given by the Association of Environmental and Engineering Geologists (AEG) and the Canadian Geotechnical Society, to its namesake, Dr. Robert L. Schuster, U.S. Geological Survey. The conference and Schuster award summary was in the September 2007 issue of AEG News (V. 50, No. 3). For more details on this award, a fuller report on the conference, or to order the publications from this meeting, go to the following website: http://www.aegweb.org.

Available from the AEG online bookstore are:

- The book, <u>Landslides and Society</u>, <u>Keynote Presentations</u> edited by A. Keith Turner and Robert L. Schuster, AEG Special Publication 22 containing all the keynote and invited papers.
- 2) The CD, 1st North American Landslide Conference Field Trip Guide edited by David A. Noe and Jeffrey A. Coe, AEG Special Publication 21.
- 3) The CD, <u>Conference Presentations: 1st North American Landslide Conference</u> edited by V.R. Schaefer, R.L. Schuster and A.K. Turner, AEG Special Publication 23.

William "Pat" Rogers of the Colorado Geological Survey Receives Distinguished Practice Award

Another award presented at the EGD luncheon was the Distinguished Practice Award in recognition of an outstanding individual for their continuing contributions to the technical and/or professional stature of engineering geology. Dr. Susan Cannon (U.S. Geological Survey) and Dr. David Noe (Colorado Geological Survey) prepared the award citation.

William "Pat" Rogers has played many roles in the practice of Engineering Geology, both as a front man and as an influential background organizer. Pat was one of the authors of Colorado's innovative land-use laws that were launched in the early 1970s following a demonstration of the use of sound geologic reasoning to address development issues in hazardous areas. These, and subsequent, laws defined the need for geologic suitability investigations and disclosure of hazards in Colorado. Pat also wrote the guidelines that are currently being used by counties to enact local regulations under these laws.

Pat was also the mastermind of the Colorado Geological Survey's statewide landuse review program, which now conducts around 500 technical reviews of landuse proposals per year for local governments. These reviews address the geologic suitability of proposed development sites and plans, and result in increased hazard mitigation and reduced losses from geologic hazards, providing an important benefit to the public.

Pat has also developed an energetic corps of young engineering geologists who are presently tackling many of geologic problems within Colorado and beyond. Many of these engineering geologists attribute their success in the arena of hazard awareness and mitigation to Pat's advice and encouragement. Pat's enthusiasm and passion for the field are well known, as is his willingness to share this passion.

Nominations Requested

Reading about individuals who were honored in 2007 with various awards should bring other worthy individuals to mind. Don't depend on the Committees and your officers to know about everyone deserving of receiving the Distinguished Practice or Meritorious Service Awards or excellent candidates for the Jahns Distinguished Lectureship. Both award qualifications and a listing of past recipients of these awards can be found at the EGD website: http://rock.geosociety.org/egd/index.html. Send your nominations to Paul Santi at psanti@mines.edu by February 28, 2008 (while 2008 year is a leap year, it appears that tradition overruled using the extra available day).

Division Expresses Appreciation for Dr. Hatheway's Many Contributions with Meritorious Service Award

Outgoing EGD Chair Syed Hasan read the citation and presented Dr. Allen W. Hatheway with the Meritorious Service Award at the EGD luncheon and awards ceremony on October 29th in Denver. His citation clearly captures Allen Hatheway's boundless energy and passion for engineering geology that resulted in his receiving this recognition.

ENGINEERING GEOLOGY DIVISION OF THE GEOLOGICAL SOCIETY OF AMERICA

Dr. Allen W. Hatheway, Fellow of the Geological Society of America, stands out prominently among the handful of engineering geologists who have contributed immensely to the profession. Few would come close to his outstanding record that spans careers in the army, industry, academia, and consulting. With the beginning of his professional life in 1961, Allen has for nearly 45 years consistently served the profession in all imaginable areas where an engineering geologist would engage. Combining the unique combination of expertise that he acquired after working for 20 years in the industry, and an equal number in the academia, and seven years as a private consultant, Allen is perhaps the only individual in our profession who may not have any match.

Allen received his bachelor's degree in geology in 1961 from UCLA and MS and PhD in geological engineering from the University of Arizona in 1966 and 1971 respectively. He is a registered geological engineer in Arizona, registered civil engineer in California and Massachusetts, registered engineering geologist in California, and registered geologist in California, Maine, and Missouri. He was the VP and Chief Geologist for Haley & Aldrich, Inc., Cambridge, MA from 1976 to 1981 and accepted the position of full professor of geological engineering at the University of Missouri-Rolla where, from 1981-2000, he was heavily engaged in teaching and research, producing many MS and PhD graduates. He was actively involved in extending employment contacts for his students who were always fully employed professionally upon graduation at the BS, MS or PhD levels. He co-authored a college textbook with Robert Legget titled Geology and Engineering that was published by McGraw-Hill in 1988. Prof. Hatheway took early retirement toward the end of 1999 and has since been actively engaged in litigation forensics and geo-environmental trouble shooting and is the world's leading engineering geologic consultant in the field of former manufactured gas plants and other coaltar sites. Earlier, in 1991 he had retired as a Colonel after 19 years of distinguished service to the US Army for which he received the Meritorious Service Medal.

The EG Division's meritorious service award requires the nominee to have rendered outstanding service to the Division. Allen not only meets but exceeds the criteria. I would highlight just some of his services:

- Editor, Division's newsletter, The Engineering Geologist
- Member Executive Council
- Co-editor Reviews in Engineering Geology Volume IV, 1979, Geology in the Siting of Nuclear Power Plants
- Instituted EG Division's Distinguished Practice award
- Served as the EGD chair in 1980
- Replicated a supply of the original 1950 Berkey Gavel
- Chaired EGD Publishing Committee, 1983
- Chaired the Division's Award Committee in 1986 and 1988
- Co-authored two chapters of Heritage of Engineering Geology (1991)
- Served as the Jahns Memorial lecturer for 2000, delivering a record 76 presentations
- Has organized and/or monitored numerous EGD sessions at GSA's Annual and Sectional Meetings
- Since 1988 has authored or co-authored seven GSA Memorials to commemorate the life and work of departed members of the Division.

Allen Hatheway is passionate about the profession and continues to be one of the most active members of the EG Division. It is, therefore, most befitting to bestow the Meritorious Service Award to Dr. Allen W. Hatheway.



Dr. Allen W. Hatheway holds his Meritorious Service plaque with citationist Syed Hasan.

Remember to Schedule 2008 Jahns Lecturer

As this year's Richard H. Jahns Distinguished Lecturer, Dr. John Clague, of Simon Frasier University, Burnby, BC, is offering four different lectures. They are:

- "Tsunamis Stealth Killers"
- "Earthquake Hazards and Risk in the Pacific Northwest"
- "The Formation and Failure of Natural Dams"
- "The Last Great Ice Sheet in Western Canada"

These exciting lecture topics are sure to achieve the lectureship goal of promoting student interest in engineering geology. One of Dr. Clague's professional interests is earth science education. He is a past president of the Canadian Geoscience Education Network and regularly gives public lectures, field trips, and media interviews on geoscience issues. He has written two successful books on societally relevant geoscience issues in the Pacific Northwest. Coupled with his significant research accomplishments, he is sure to captivate the interest of both professional and student audiences. Requests for scheduling lectures should be directed to John Clague at jclague@sfu.ca.

Upcoming Engineering Geology Conference in Malaysia

Assoc. Prof. Dr. Husaini Omar, University Putra, Malaysia, has forwarded an announcement of a conference entitled "Recent Advances in Engineering Geology." The conference will be held July 28-20, 2008 in Kuala Lumpur, Malaysia. Conference Chair Dr. Omar notes that the deadline for abstracts is April 1, 2008. The themes at this meeting will be:

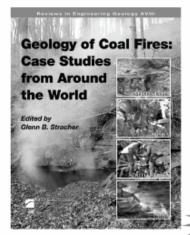
- 1. Engineering Geology Mapping
- 2. Geohazard
- 3. Rock Slope Stability
- 4. Geo Environment
- 5. GIS and Geomorphology
- 6. Tunnelling and Excavation
- 7. Education in Engineering Geology
- 8. Site Investigation and Instrumentation
- 9. Soil Erosion
- 10. Geo Materials
- 11. Geo Structures

The conference language will be English. Additional details are available through the conference organization website at: http://www.cipremier.com.

Reviews in Engineering Geology XVIII



Geology of Coal Fires: Case Studies from Around the World edited by Glenn B. Stracher



Geology of Coal Fires: Case Studies from Around the World is The Geological Society of America's first publication devoted to "coal-fires science," an exciting and interdisciplinary area of research gaining international attention in recent years. Coal fires are preserved globally in the rock record as burnt and volume-reduced coal seams and by pyrometamorphic rocks, explosion breccias, clinker, gas-vent-mineral assemblages, fire-induced faulting, ground fissures, slump blocks, and sinkholes. Coal fires are responsible for coronary and respiratory diseases and fatalities in humans, as well as arsenic and fluorine poisoning. The heat energy, toxic fumes, and solid by-products of combustion destroy floral and faunal habitats, while polluting the air, water, and soil. This volume includes chapters devoted to spontaneous combustion and greenhouse gases, gas-vent mineralogy and petrology, paralavas and combustion metamorphic rocks, geochronology and landforms, magnetic signatures and geophysical modeling, remote-sensing detection and fire-depth estimation of concealed fires, as well as coal fires and public policy.

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