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

THE ENGINEERING GEOLOGIST

VOLUME 33, NUMBER 1 MARCH 1999

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Deadline for The Engineering Geologist: **July 1, 1999.** Send to: Jerry DeGraff, 5339 N. Orchard Avenue, Fresno, CA 93710 or E-mail: Fishlake@Worldnet.att.net

The Division is pleased to announce the formation of the Roy J. Shlemon Scholarship Fund for Engineering Geology, brought about by a generous contribution from Dr. Shlemon. The dividends from this fund, estimated at about \$6000 a year, will benefit numerous students interested in engineering geology. Together with our current Award Fund, four scholarships will be awarded; two, \$1000 awards, 1 for Master's level and 1 for Doctorate's, as well as two \$500 second place awards in these categories. The remaining funds will be awarded to encourage students to attend Section meetings, field trips, and short courses, as well as the Annual meeting. Stay tuned for more information in forthcoming newsletters.

Dr. Roy J. Shlemon was the Richard H. Jahns Distinguished Lecturer in 1995 and received the Division's Distinguished Practice Award in 1998. He is a trustee of the Geological Society of America Foundation and the Engineering Geology Foundation.

1998 Student Award Presented to Stanley Galicki

The Engineering Geology Division Student Award was given to Stanley Galicki of Millsaps College. Mr. Galicki submitted a research proposal entitled: "Temporal equivalent geochemical and dendrochemical analysis and correlation of heavy metal loading in a wetland sediment profile". The Engineering Geology Division Student Award consists of an additional \$500 added to the funding provided through the Student Research Awards program. The funds are from the dividend of the

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Division's Fortieth Anniversary fund. Mr. Galicki's selection was announced at the EGD luncheon held during the annual meeting. A certificate accompanies the award notification.

Scott Burns with the certificate presented to Stanley Galicki at the EGD Luncheon in Toronto.

As noted in the proceeding article, the Engineering Geology Division Student Award will no longer be presented after 1999. The funds will be incorporated with the contribution from Dr. Roy J. Shlemon to support a total of four awards for both Master's and Doctoral-level research.

Past Engineering Geology Division Student Awardees

It is always hoped that presenting the Engineering Geology Division Student Award represents a means for furthering the career of a future environmental or engineering geologist. The EGD Newsletter editor is seeking our information about past awardees and what activities have transpired since receiving their award.

Two past awardees, Lauren Hammack and Janet Curran are featured in this issue. Their advisor, Dr. Ellen Wohl, Colorado State University, provided an update on their activities.

Lauren Hammack completed a dissertation entitled, "Debris-fan formation and rapid modification at Warm Springs, Yampa River, Colorado" in spring 1994. She also published a journal article of the same title in *Journal of Geology* (1996). She is currently employed by the Water Rights Branch of the National Park Service in Ft. Collins, Colorado.

Janet Curran gave an oral presentation at the 1997 annual GSA meeting summarizing her thesis research. The presentation was entitled "Flow resistance of large woody debris in headwater streams of the Washington Cascades." Janet is currently completing her MS thesis, which she expects to defend during spring 1999. She will also be preparing a journal article based on her thesis work.

(Editor's Note: It would be a pleasure to hear about other past EGD Student Awardees either directly or from their advisors. They would be featured in a future Newsletter.)

1998 Richard H. Jahns Distinguished Lecturer Finishes His Term

Dr. Thomas L. Holzer, Chief of the Branch of Engineering Seismology and Geology, U. S. Geological Survey gave his 1998 Richard H. Jahns Distinguished Lecture at the GSA annual meeting in Toronto, Canada. In his lecture, Dr. Holzer addressed the geologic aspects of risk loss models. These models are being developed by the insurance industry to establish appropriate premium rates for earthquake and other natural hazards.

Dr. Thomas L. Holzer (on left) answers questions following his presentation in Toronto. Robert A. Larson (standing) and Scott Burns (seated) jointly chaired a technical session at the GSA Toronto Annual Meeting.

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(Note: An abstract of the 1998 Richard H. Jahns Distinguished Lecture was printed in the previous issue of the Engineering Geologist, V. 32, N. 1, August 1998)

Engineering Geology Division Financial Report and Membership

A Management Board meeting for the Engineering Geology Division was held during the GSA annual meeting in Toronto. Mr. Robert A. Larson presented a financial report showing that Division assets on December 31, 1997 totaled \$12,656.79. These assets on December 30, 1998 totaled \$13,327.95.

The funds are used to 1) produce the EGD Newsletter (about \$600 per issue), 2) reimburse student members attending short courses for their tuition, 3) pay the cost of EGD Division awards (plaques and luncheon), and 4) annual meeting room rental. It supports the Richard H. Jahns Distinguished Lectureship in cooperation with the Association of Engineering Geologists. There was some discussion of increasing support due to mounting travel expenses.

The EGD Award Fund which is administered by the GSA Foundation had \$24,186.30 on September 30, 1998. This fund was formerly the Fortieth Anniversary fund. The dividends provide the funds for the Engineering Geology Division Student Award.

Divisions, including EGD, declined in recent years. Only 30% of the membership of the Geological Society of America belong to a Division. At the time of the 1998 GSA annual meeting, yearly membership of the Engineering Geology Division had risen from 733 members to 763 members. It is hoped that all Division members will continue to support efforts to increase our membership. It is especially important to recruit student members to help their professional development early in their careers.

Environmental and Engineering Geoscience Continues as Joint Publication

Don Davidson, Executive Director of the Geological Society of America, and Chris Mathewson, Executive Director of the Association of Engineering Geologists, signed a new memorandum of understanding for joint publication of the journal, *Environmental and Engineering Geoscience*. The agreement covers operations during the next four years.

Environmental and Engineering Geoscience is fortunate that Dr. Kerry Cato has agreed to serve as one of the joint editors. Former editor, Norman Tilford, was killed in a tragic airplane accident last year. Dr. Cato explained efforts to improve the quality of the journal.

The EGD strongly supports this publication as an outlet for research in environmental and engineering geology. Division members are encouraged to give serious consideration to *Environmental and Engineering Geoscience* as an outlet for their research efforts.

Burwell Nominations Sought

Whether you are reading *Environmental and Engineering Geoscience* or another journal containing quality papers on environmental and engineering geology, please keep the E. B. Burwell, Jr., Award in mind. This award is made 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. The paper that receives the award must (1) deal with engineering geology or a

The Engineering Geology Division is the fifth largest Division in the Geological Society of America. The number of GSA members joining

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closely related field, and (2) have been published no more than 5 years prior to its selection. There are no restrictions as to the publisher or publishing agency of the paper. The author or authors of the selected paper need not be a member(s) of the Engineering Geology Division or of the Geological Society of America and need not be a resident(s) or citizen(s) of the United States.

Nominations for the Burwell Committee should be sent to the Chair of the Engineering Geology Division. Scott Burns can be reached at: Dept. of Geology, Portland State University, P.O. Box 751, Portland, OR 97207-0751. His telephone number is (503) 725-3389 and e-mail is scott@ch1.ch.pdx.edu. The deadline for nominations for the Burwell Award for 1999 was Feb. 28, 1999. The deadline for the Burwell Award for 2000 will be Feb. 29, 2000.

Division Management Board Changes at the 1998 GSA Annual Meeting in Toronto

It may look like a serious scientific disagreement has broken out. But it is actually Outgoing EGD chair, Vince Cronin, handing over the Berkey gavel to Incoming EGD chair, Scott Burns.



Vince Cronin (on left) passes gavel to Scott Burns at the Engineering Geology Division Luncheon in Toronto

Another change was election of David J. Verardo as the Member-at-Large. Dr. Verardo was completing his appointment as a GSA Congressional Fellow. He served in the office of Senator Ron Wyden (D-OR).

The 1998-1999 EGD Management Board is:

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EGD Program Proposed for 1999 GSA Annual Meeting, Denver, Colorado

Robert A. Larson, Division Program Chair

The following sessions and activities were proposed to GSA for the 1999 annual meeting. Thanks are due to all of those listed for their proposals. We cannot have a program without proposals. GSA will cull this list and let us know what they are willing to accept in early spring. The final list of accepted proposals will be included in the next Newsletter in May. The proposed short course has already been culled due to reduction in the number of short courses being allowed at the meeting.

Pardee Keynote Symposium

<u>Dam Geology: New Science Applied to Old Problems</u>

Robert A. Larson and Kerry D. Cato

Topical Sessions

Geologic Input to Public Decision-Making: The Need for Greater Predictive Capability.

Jerome V. DeGraff

<u>Digital Field Mapping and Data Collection.</u>

John H. Kramer, Raymond C. Kimbrough and Karen R. Olsen

Engineering/Environmental Geology – State Geological Surveys & Academic Communities.

Duane Eversoll and Robert A. Larson

Geologic Hazard Mapping-The State of the Art Randy Jibson and Ed Harp

New Advances in Mine Site Remediation and Reclamation: Taking a Landscape Perspective Anne MacDonald

Reactivation of Old Landslides
Scott Burns and Robert A. Larson

<u>Deicing Salts and Their Effect on Crushed Rock</u> <u>Aggregate</u>

Peter P. Hudec and Robert A. Larson

Field Trip

Bouncing Boulders, Rising Rivers and Sneaky Soils: A Primer to Geological Hazards Along Colorado's Front Range

David C. Noe, James M. Soule, and Jeffrey L. Hynes

Short Course

<u>Managing Environmental Projects</u> (A Review Course for Registered Environmental Manager Certification)

Field Trips and Short Courses Needed for 2000 GSA Annual Meeting in Reno, Nevada

Deadlines for proposing field trips and short courses come early for GSA annual meetings. Duane Eversoll serves as the EGD Program Chair for this annual meeting. He would like to hear from anyone with a proposal. He can be contacted at the address, telephone, and e-mail address provided in the previous article on EGD Management Board members.

Duane advises that it is not too early for Pardee Keynote Symposium and topical sessions. The competition for Pardee Keynote Symposia is especially keen. The changing format of the annual meeting no longer guarantees a symposium slot or topical session to individual GSA Divisions. While this should ensure that quality sessions are proposed, it also means that the number of environmental and engineering geology sessions depends on the proposals received. EGD members with symposium and topical session proposals should contact Duane Eversoll as soon as possible.

1998 Distinguish Practice Award Given to Roy J. Shlemon

Roy J. Shlemon was presented with the Distinguished Practice Award from the Engineering Geology Division at the EGD Luncheon held during the GSA annual meeting in Toronto. This award is given to recognize outstanding individuals for their continuing contributions to the technical and/or professional stature of engineering geology.

Roy Shlemon holds the Distinguished Practice Award. Looking on is Robert A. Larson, the award citationist.

Robert A. Larson served as citationist for this award. The citation read:

"Early in his career, Dr. Shlemon recognized the importance to engineering geology of applied soil stratigraphic and geomorphic techniques. helped pioneer the acceptance and use of these techniques, which are now common in practice. Roy bridged the gap between academia and applied geology by mature scientific leadership, the training of many young geologists, personal funding of his visions of our profession, and over 30 years of dedicated professional practice. He has gained international stature through his work on major projects throughout the world and through his extensive lecturing. His career exemplifies that of the scholar geologist who still knows how to get the job done."

1998 Burwell Award Given for Publication on the Lower Mississippi Valley

The E. B. Burwell, Jr., Award for 1998 was presented to Roger T. Saucier, Lawson M. Smith, and Whitney J. Autin for their editorship of the volume entitled, *Geology of the Lower Mississippi Valley*. The citationist for the Burwell Award was Roy J. Shlemon. Both Roger Saucier and Whitney Autin were able to attend the EGD Luncheon at the GSA annual meeting in Toronto. They each made gave a response after the reading of the citation.

Vince Cronin (on left) presents plaque for the E. B. Burwell Jr. Award to Roger Saucier. Citationist Roy Shlemon is in the background.

Geology of the Lower Mississippi Valley features chapters authored by experts in various geologic aspects of this area. All three editors contributed as authors to this volume. Their starting point for understanding this important area is the work done by Harold Norman Fisk who served as a consultant to the Mississippi River Commission from 1948 to 1964. Fluvial geomorphology, geoarcheology, Pleistocene stratigraphy, hydrogeology, and the response of the Lower Mississippi River to river engineering are addressed under the topical chapters. Geology of the Lower Mississippi Valley is available through the publisher, Elsevier Science. The volume was reviewed in Environmental and Engineering Geoscience, Vol. 3, No. 4, p. 600.



Vince Cronin (on left) hands the plaque for the E. B. Burwell, Jr., Award to Whitney Autin.

Other Books of Interest to Environmental and Engineering Geology Professionals

Two books were sent to the Newsletter Editor to bring to the attention of EGD members. The first is:

P.F. Karrow and O. L. White, eds. 1998, <u>Urban</u> <u>Geology of Canadian Cities</u>: Geological Association of Canada Special Paper 42, 500 p.

This volume contains papers presented at a symposium at the GAC annual meeting held at the University of Waterloo in 1994. The geology and engineering problems of 23 cities are reviewed with coverage from Victoria, British Columbia to St. John's, Newfoundland. Also reviewed is the status of the 1972 Geological Survey of Canada geotechnical data bank project and current activities in data compilation.

The other book received the Claire P. Holdredge Award as an outstanding contribution to the Engineering Geology profession from the Association of Engineering Geologists. It is:

S. E. Hasan, 1996, <u>Geology and Hazardous</u>
<u>Waste Management</u>, Prentice-Hall: New York, 387
p.

Readers are provided with a thorough understanding of the principles of management of hazardous waste integrated with key concepts from geology and geotechnics.

Dr. Mavis Kent Selected as 1999 Richard H. Jahns Distinguished Lecturer

Dr. Mavis Kent, a Senior Hydrogeologist for the Oregon Department of Environmental Quality, was selected as the Richard H. Jahns Distinguished Lecturer for 1999. The title of her lecture is: "Environmental Cleanup: Basic Engineering Geology is Still Important". The lecture explores the role of geology in solving environmental pollution problems. Cleanups can be complex with difficult and sometimes competing regulatory, political, economic, and technical goals. Sound technical solutions to environmental problems, in the end, must still rely on a good understanding of geologic and hydrogeologic conditions. The lecture is a three-part presentation. Dr. Kent starts by describing her role as a Senior Hydrogeologist

for a State regulatory agency. A series of "concepts" serve to highlight how geology and hydrogeology are important in environmental cleanup in the second part. The third part covers case histories are used to illustrate how an understanding of site geology and hydrogeology was important in the process of investigating and evaluating environmental pollution. While not as famous as sites like Stringfellow or Times Beach, the sites addressed in the case histories are powerful examples because they are ordinary and show how important and pervasive the need is to establish a good understanding of geology. Through the presentation, Dr. Kent weaves the theme that geology is still a very important part of the working world.

Dr. Mavis Kent brings over 25 years of applied experience in engineering geology. In addition to her current position at the Oregon Department of Environmental Quality, she worked for the San Francisco Bay Regional Water Quality Control Board and the Los Angeles Regional Water Quality Control Board. Her experience is not limited to regulatory agencies. Dr. Kent worked for private consulting firms and as an individual Consultant. She received her Ph.D. in Geology in 1995 from Texas A&M University. During her tenure at Texas A&M University, Dr. Kent was a Lecturer in the Geology Department. Previously, she received an MS in Geology in 1979 and BS in Geology in 1972 from Portland State University, Portland, Oregon.

This marks the first time the recipient of the Richard H. Jahns Distinguished Lectureship has been a woman. Dr. Kent joins the ranks of engineering geologists recognized, by this honor, for their exemplary record of professional experience and academic accomplishment. Like many past Richard H. Jahns Distinguished Lecturers, Dr. Kent is actively involved as a member of the Geological Society of America and the Association of Engineering Geologists. She served as President of the Association of Engineering Geologists and held other positions over the years.

(Note: Richard H. Jahns (1915-1983) was an engineering geologist who had a diverse and distinguished career in academia, consulting, and government. The Richard H. Jahns Distinguished Lectureship was established in 1989 and is jointly administered by the Association of Engineering Geologists and the Geological Society of America.