



The Hydrogeologist

NEWSLETTER OF THE HYDROGEOLOGY DIVISION OF THE GEOLOGICAL SOCIETY OF AMERICA: JANUARY 1985

MESSAGE FROM THE CHAIRMAN

For any gamblers among the Hydrogeology Division members, Reno was a winner. We had an outstanding program prepared by Terry Katzer, including two hydrogeology field trips, one in the Reno area and the second in southern Nevada dealing with the National Test Site. The program also had several excellent symposiums which were well attended.


The first Hydrogeology Division cocktail party was held in honor of Jane Maxey, wife of George B. Maxey. It was a pleasure for many of us senior citizens to see Jane and her family plus it gave opportunity for a large turnout of thirsty hydrogeologists to get together. Although there was some trepidation on the part of GSA in holding the national meeting in Reno, it quickly became apparent that good facilities, a good program and good fellowship made for a very successful meeting. This offers us a challenge to top '84 with our meeting in Orlando, Florida (Disney World) in 1985. Organization for that meeting is in the hands of Mark Stewart, Program Chairman for the Hydrogeology Division; John Vecchioli, Symposium Chairman; and Jock Kimrey, Field Trip Chairman. Several symposiums have been proposed for the meeting as well as pre- and post-hydrogeology field trips.

You all come in '85 to Orlando.

At the 1984 business meeting, the possibility of a Hydrogeology Division sponsored publication series similar to that of the Engineering Division was broached by Mike Wahl, Executive Director, GSA. An Ad Hoc Committee has been formed with Harold Meisler, USGS, Trenton, New Jersey as Chairman. They will be looking into whether there is a need for such a series in hydrogeology, whether there is sufficient material, and whether we should, as a Division, sponsor such an effort. Any comments that you have, please pass on to Harold Meisler.

Each of the Section Meeting Representatives have accepted reassignment and have agreed to have a Hydrogeologic Symposium at the next section meeting in 1986. In 1984 and 1985, the Northeast Section has had symposiums on hydrotechnology and hydrologic transport of organic chemicals. I would like to see something similar at each section. Please attend your sectional meeting and express your feelings to your Sectional Representative this year so that we can have better hydrogeology programs at each of the regions.

It has been my pleasure to serve the past several months as President of the Hydrogeology Division because of the excellent cooperation of many of the members of the Division serving on various committees. I look forward to a pleasant year and seeing you all either at the Sectional meetings or at the National meeting in Orlando.


Grover H. Emrich, Chairman
Hydrogeology Division

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HIGHLIGHTS OF 1984 ANNUAL
MEETING IN RENO

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It was a record year for attendance at GSA, 6065, and the Hydrogeology Division was no exception. The Birdsall Lecture given by Frank Schwartz was attended by 125; the luncheon (sold out well in advance) by 112; a few more came in for the award presentations; and 48 stayed through the business meeting.

Judging by the number of people that were able to fit into the Roxy Room, the cocktail party in honor of Jane Maxey was a great success. It provided a wonderful opportunity for Jane, and the family of Burke Maxey, to renew old acquaintances and former associates, and to catch up on all the news.

An outstanding program for hydrogeology was arranged by Terry Katzer. He did an excellent job in arranging two symposiums and two oral sessions that included a total of 45 hydrogeology papers as well as a poster session. Field trip leaders were Pat Glancy, pre-meeting trip, and Jack Hess, post-meeting trip.

Frank W. Schwartz, the 1984 Distinguished Birdsall Lecturer, presented his talk, "A Case Study of Ground-water Contamination from a Chemical Spill." During the year Frank visited 14 universities and geological surveys.

The award presentations after the luncheon were the high point of the hydrogeology events. Pat Domenico, citationist for the O. E. Meinzer Award, presented the sterling silver bowls to the 1984 recipients, Franklin W. Schwartz and Leslie J. Smith, for their papers on stochastic modeling of mass transport in ground water that were published in Water Resources Research.

Joe Rosenshein, citationist for the Award for Distinguished Service in Hydrogeology, presented the first such award, posthumously, to George Burke Maxey. His widow, Jane, was there to accept the award.



NOMINATIONS FOR
DISTINGUISHED SERVICE AWARD
SOLICITED

The Distinguished Service Award Committee is soliciting nominees for this new Hydrogeology Division award. The award is based on sustained creditable service to the hydrogeology profession. The first award was made posthumously last year to George Burke Maxey. Nomination forms may be obtained from the Secretary-Treasurer of the Division, Phyllis Garman, or the Chairman of the selection committee, Darryll T. Pederson. Nominators must be a member of the Hydrogeology Division and should include in their nomination the present address and telephone number of the nominee as well as specific reasons for your nomination, including activities and accomplishments of the person they are nominating. Nomination should be sent to the chairman of the selection committee:

Darryll T. Pederson
Conservation and Survey Division
University of Nebraska
113 Nebraska Hall
901 North 17th Street
Lincoln, NE 68588-0517

MINUTES
1984 ANNUAL BUSINESS MEETING
RENO, NEVADA

Prepared by Phyllis M. Garman, Secretary-Treasurer

The 1984 Annual Business Meeting of the Hydrogeology Division was called to order by Chairman, George Davis, at 1330 hours, Tuesday, November 6, 1984, in the Metro Room, MGM Grand Hotel, Reno, Nevada. Attendance was 48.

Secretary-Treasurer, Phyllis Garman, asked for corrections or additions to the Minutes of the 1983 Annual Business Meeting as published in the April 1984 issue of The Hydrogeologist. No corrections were noted; therefore, the minutes were approved.

The Treasurer's report followed. As of September 30, 1984, the division had a balance of \$2599.46. The Birdsall Appropriated Fund balance was \$10,653.28 of which \$10,000.00 is restricted. There were 973 members in the Division as of September 30, 1984.

A moment of silence was observed for Mahdi Hantush, William A. Fowler, Jr., Nathaniel M. Perlmutter, and Clifton Bole; affiliates who had passed away during the year.

Garman announced the results of the election of officers. A total of 198 ballots were returned. The 1985 Management Board will be the following members: Grover Emrich, Chairman; Bill Back, First Vice-Chairman; Wayne Pettyjohn, Second Vice-Chairman; Phyllis Garman, Secretary-Treasurer, for a two-year term; and George Davis, Past Chairman.

Davis called for volunteers for open positions on committees. Anyone with enough time and desire to work on committees report to Chairman-elect, Grover Emrich.

Terry Katzer, Hydrogeology Division Program Chairman for Reno was asked to report on the meeting. He stated that this would be a record year. For the entire GSA meeting 1249 papers were submitted and 900 were accepted, which brought the rejection rate to about 28%. For the Hydrogeology Division, some trading between sessions made the count difficult, but provided an opportunity to keep the rejection rate down. The number of papers submitted were 46-48. For Hydrogeology I and II there were 19 papers. All poster papers submitted were accepted. The symposium on Arid-Zone Isotope Hydrology consisted of 11 papers and the symposium on the Nevada Test Site had 15. That made the Division rejection rate about 24%. Terry mentioned that his committee was unaware of the poor attendance at past meeting field trips so they had planned for larger groups.

Pat Glancy, leader for the pre-meeting trip on Truckee-Carson River Hydrogeology, reported that they had a small but very attentive group of fifteen. The trip was organized jointly by geologists from the Desert Research Institute and the U.S.G.S. office in Carson City. Judging by the response of those who attended the trip, it was quite successful.

Jack Hess, leader for the post-meeting trip on Hydrogeology of the Nevada Test Site, reported that he presently had seventeen signed up for the trip. Problems in getting access to the Test Site developed, but the trip is go. Roger Jacobson is co-leader.

At the conclusion of the program and field-trip reports, George Davis called for a vote of thanks to Terry Katzer for his excellent management of the program.

Mark Stewart, Division Program Chairman for the 1985 Orlando meeting, reported on the preliminary plans of that meeting. The uniqueness of Florida hydrogeology will be shown. A symposium on Multiple Use of Aquifer Systems is being organized by John Vecchioli. Two field trips are already lined up; a 1-1/2-day pre-meeting trip combining urban karst hydrology with its problems of water supply and wastewater disposal led by Joel Kimrey, with an excursion into a karst region with relatively high relief, led by Barry Beck. The post-meeting trip will be shared with the Economic Geology Division. It will be for two days in the pebble phosphate district of Central Florida. Jim Cathcart, Tom Scott, Mark Stewart, and Sam Upchurch will be the leaders. The "maybe" trip will be Bill Back's trip to the Yucatan, which was run two years ago.

Bill Back announced that Division Program Co-Chairmen for the 1986 San Antonio meeting will be Pat Domenico and Jack Sharp. Preliminary plans are for a field trip on the Edwards Limestone; and perhaps as a GSA symposium, the Hydrogeology of Deep Sedimentary Basins as suggested by Charles Kreitler.

Frank Schwartz reported on the very successful Penrose Conference held in late September on Flow Processes in Fractured Rock. It was convened by Schwartz and Leslie Smith. There were 80 attendees. A discussion of the meeting will be published in Geology.

An update on the Decade of North American Geology (DNAG) Hydrogeology volume was given by Bill Back. He stated that there are over 100 contributors and that the book, The Hydrogeology of North America, will be finished by next June and published by a year from now. The 28 volumes composing DNAG will be published in 1988. Division authors were to meet immediately following the business meeting.

MINUTES

Paul Seaber, Co-Chairman of the Committee on Hydrostratigraphic Units, reported on the work of the committee this past year. They are working with the North American Commission on Stratigraphic Nomenclature, Donald Owen, Chairman. Together with a draft code on geologic reservoirs from AAPG, a draft code on hydrostratigraphic nomenclature will be submitted next year. Paul noted that in 1963 Burke Maxey had approached the Commission about having a hydrostratigraphic nomenclature, but was turned down. This committee has been working with recent data collected for DNAG. The new, proposed definition of hydrostratigraphic units is: "A hydrostratigraphic unit is a body of rock defined and characterized by its permeability and porosity. A hydrostratigraphic unit may occur in one or more lithostratigraphic, allostratigraphic, or lithodemic units and is unified and delimited on the basis of its water-bearing characteristics." Other definitions include aquifer, aquitard, and aquifuge. The primary question for now is, what is the nature and boundaries of the units to be mapped, and to consider the ranks, hierarchy, and nomenclature later. The committee was to meet after the business meeting.

Keros Cartwright, Co-Chairman, Hydrostratigraphic Units Committee, next reported on the morning meeting with the Commission. The major step was the agreement to work together. Among many questions brought up was the definitions of aquifer vs aquitard. Suggestions from the community of hydrogeologists are welcome and necessary. A draft report will be published perhaps in The Hydrogeologist or Geology to solicit comments. The committee has one more year allocated to them.

Chairman Davis then asked Grover Emrich to report on Section Meeting Representatives. Five of the six representatives have already accepted reappointment with the understanding that they will try to organize a symposium in hydrogeology at the next possible meeting, which would be 1986. Grover reported that the Northeast Section had a very successful symposium this year on Hydrotechnology. About 200 attended. They plan to have another symposium next spring on "Hydrologic Transport of Organic Chemicals."

Next on the agenda Davis called for the ad hoc committee reports. The report from the Committee on Hydrogeologist Certification, which was chaired by O. M. Hackett, was given by Dave Stephenson. The full report will be in the records, but in brief the committee had a three-fold charge: (1) to look at the merits and drawbacks of certification of hydrogeologists, particularly the programs being offered by the American Institute of Hydrology (AIH) and the National Water Well Association (NWWA); (2) to develop recommendations as to whether the Division should endorse or oppose, or take a position on these actions; and (3) to draft a report. The conclusion of the committee was, "that the concept of certification of professionals is already in practice (professional engineers and professional geologists), we see no need for endorsement of the concept by the Hydrogeology Division. We view with concern the presumptive moves of AIH and NWWA to use, whether intentionally or not, the certification process toward assuming a sole-spokesman role for ground-water hydrologists and hydrogeologists. We view with concern what appears to be an impending turf struggle by AIH and NWWA for dominance in controlling/being spokesman for ground-water hydrologists. We view with concern the further splintering of the earth science field by such a certification process."

The recommendations of the certification committee to the Division were: "The Hydrogeology Division take no action to endorse proposals by either AIH or NWWA; that the Division encourage its members to inform themselves concerning pre-existing arrangements for certification for professional engineers or professional geologists; that the division encourage members who feel strongly the need for specialty certification or registration as hydrogeologists separate from a professional engineer or a professional geologist to involve themselves in urging and developing legislation for such certification or registration at the State level; that the Division encourage its members to keep abreast of new developments in the proposals for certification of hydrogeologists; that the Division continue to monitor and inform its members of further developments with respect to certification and/or registration of hydrogeologists."

Stephenson then read a letter from Mike Wahl to George Davis dated September 26, 1984. "On July 27th I wrote to you concerning the matter of GSA's policy regarding certification/registration of geologists. In that letter I told you I would bring the matter to the attention of the Executive Committee at the next meeting. That group met on September 17th and again reiterated present policy that GSA, as a scientific society, does not take a position on the question of certification/registration of geologists. This matter should be left to the individual and is not an area in which official policy should be established."

Chairman Davis entertained a motion to accept the report of the ad hoc Committee on Hydrogeologist Certification. A motion to accept the report was made by Bob Bean. It was seconded by Gordon Stephenson and passed unanimously.

MINUTES

The next committee report was on the Meritorious Service Award. Darryll Pederson, committee chairman, explained that the committee was asked to look into the possibility of an award for outstanding service to the field of hydrogeology. Committee members represented different areas: State government and academics, Darryll; federal government, Joe Rosenshein; and industry and consulting, Dave Stephenson. The committee found that GSA allows only one name award per division, which for Hydrogeology is the Meinzer Award, and that there are other meritorious service awards; therefore, the change to Award for Distinguished Service. They felt that a precedence should be set by having the first award of this kind be given to George Burke Maxey in Reno with the Management Board approval. The award is to be presented each year in memory of Maxey with a plaque and a brochure as given this year. A suggested bylaw change was presented to the Management Board with suggestions for qualifications, selection procedures, etc.

Davis explained that the Board had approved the committee's report for selection, qualifications, and award and that the bylaws changes would be considered later with other changes to be voted upon.

Davis then introduced the Division's new representative to Council, Mel Schroeder, who succeeds Art Socolow. Schroeder, who is currently at Texas A & M, mentioned his background work with U.S.G.S. Water Resources Division personnel Parker, LeGrand, Stringfield, and LaMoreaux in the past. He attended the morning management board meeting and will be representing the Division at the Council meeting.

New business to be discussed was routine changes to the bylaws. Garman read the proposed changes that included gender additions; deadline updates for the award nominations from May 1 to April 1; all appointed committees to be for one year unless otherwise specified; and other word changes for clarification. Davis called for a motion to approve the proposed changes. Phil LaMoreaux so moved. It was seconded by Keros Cartwright. The motion was carried unanimously.

Garman announced that the dues rate voted on last year for Division members is not in effect for 1985. Member dues are now \$5.00 with \$2.00 designated for the Birdsall Fund. Dues for students are now \$2.00.

Davis then led discussion on points of clarification for the Award for Distinguished Service.

After Davis read the proposal, Bob Bean questioned whether the number of names to be submitted would be three or up to three. Bill Back felt that the wording should be strengthened to be for GSA members only. Paul Seaber suggested a five-year minimum contribution. Al Leonard suggested it include former members, such as retirees. Mel Schroeder made a motion to approve the Distinguished Service Award amendment to the bylaws. The motion was seconded by Richard Parizek. The motion was carried unanimously. Davis asked the secretary to incorporate the changes--that the recipient must be a member of GSA and committee members are not required to submit three names--into the final copy. The award amendment will be presented to GSA for incorporation into the Division bylaws at the May Council meeting. Under new business, Grover Emrich reported on publication of papers on hydrogeology. Mike Wahl had said that GSA is interested in the publishing of symposium papers if the Division is willing. It would require a dedicated editor. Discussion followed with Kreidler suggesting it be a special publication versus annual, biannual; Parizek questioned the length of Engineering Geology publications; Back thought too little information on details was known; and Freeze felt that there must be a perceived need for the publication. Bill Back made a motion to have an ad hoc committee appointed to study the pros and cons of a Division publication. The motion was seconded by Joe Rosenshein. The motion was carried unanimously. The chairman will appoint the committee who will report at the next meeting.

With completion of the scheduled business, Davis asked for any other business reports or announcements. Ken Kolm, Colorado School of Mines and chairman of the Association of Engineering Geologists (AEG) committee for professional engineers registration of geological engineers, announced that AEG will represent geological engineers at the National Council of Engineering Examiners where there will be several sections on ground water. They propose a professional engineer's exam for a Geological Engineer. Secondly, the Colorado School of Mines has formalized a graduate program in hydrogeology.

Gordon Stephenson announced that the Rocky Mountain Section will meet April 22-24 in Boise, Idaho. There will be a symposium, Hydrogeologic Investigation of Hazardous Waste Deposits, particularly related to the western United States. A field trip is planned for Hydrothermal Activities in the Boise Area.

With no further business, George Davis thanked his colleagues for their help through the year and turned the meeting over to the new chairman, Grover Emrich. Emrich expressed his thanks to Davis for such a successful meeting and good turnout. He entertained for a motion to adjourn. LaMoreaux so moved. It was seconded by Leonard Wood. The meeting was adjourned at 1520 hours.

98TH GSA ANNUAL MEETING
ORLANDO, FLORIDA
OCTOBER 28-31, 1985

Mark Stewart, Joint Technical Program Chairman, reports that planning for this year's annual meeting in Orlando, October 28-31, is going well. The program will consist of a Division-sponsored symposium, at least two half-day sessions of volunteered papers, and a special forum on toxic wastes in cooperation with the GSA Committee on Geology and Public Policy. The Division symposium is on multiple use of aquifer systems, and the organizer is John Vecchioli, USGS WRD, 227 N. Bronough St., Tallahassee, FL 32301. The organizer of the toxic wastes forum is Terry Offield, USGS, 915 National Center, Reston, VA 22092.

There are two planned field trips and a third possible trip. The Division field trip is on karst and urban hydrogeology, and is co-chaired by Barry Beck of the Sinkhole Research Institute, Orlando, and Joel Kimmerly, USGS WRD, Orlando. This trip will look at some spectacular karst hydrogeology and some of the equally spectacular problems of urban hydrology in a karst region. The Division is co-sponsoring a trip with the Society of Economic Geology to the land-pebble phosphate district. The Division coordinator is Mark Stewart, USF, Tampa. This is one of the world's largest open-pit mining districts, and presents some very interesting ground water problems and topics including both quality and quantity questions. Bill Back may get GSA approval for his infamous Yucatan carbonate hydrogeology trip if there is enough interest expressed by the Division. If you would like to see this trip added to the program contact Bill Back, Mail Stop 431, USGS National Center, Reston, VA 22092.

In addition to the symposia, paper sessions, and field trips, there will be a Division cocktail party and awards luncheon, and the Tuesday afternoon business meeting. Include your family in your GSA planning. The meeting is being held only minutes from Disney World and EPCOT Center, and Daytona Beach is less than an hour's drive. Late October weather in Florida is springlike, with cool nights and warm, sunny days.

1985 GSA ANNUAL MEETING ...
ABSTRACT DEADLINE IS
JUNE 7, 1985

Allocation of sessions and space at the annual meeting is based on the number of abstracts submitted and past session attendance. All symposia abstracts are by invitation from the organizer. However, the Division would like to have at least two full sessions of volunteered papers at Orlando. Please start getting your abstracts ready now. If you elect consideration for either a regular session presentation or a poster session, your chances of having your abstract accepted are greatly increased. Good papers squeezed out of a regular session for lack of time can be accommodated in a poster session. Symposium abstracts should be mailed to the convenor by April 29. Volunteered abstracts should be received at GSA by June 7. Abstract forms are available from Miriam Hansen, Abstracts Coordinator, GSA, P.O. Box 9140, Boulder, CO 80301. Send the original and five copies back to GSA.

IAH NEWS

M. Ramon Llamas was elected President of the International Association of Hydrogeologists (IAH) during the IAH General Assembly in Moscow on August 10, 1984. Dr. Llamas has Ph.D. degrees in Civil Engineering and in Geology. He worked for about 15 years with the Ministry of Public Works of Spain, and is currently Professor of Geodynamics at the Autonomous University of Madrid.

Hydrogeologists from the U.S.A. also took office at the 27th International Geological Congress in Moscow. Dr. John E. Moore of the U.S. Geological Survey was installed as Vice-President of IAH after having served as Chairman of the U.S. Committee of IAH. The new Chairman of the U.S. Committee is Dr. F. L. Doyle of the Department of the Interior. Vice-Chairman is Mr. Gerald Meyer of the USGS, and Dr. Eugene S. Simpson of the University of Arizona is Secretary-Treasurer.

For membership information, contact Dr. Eugene S. Simpson, Department of Hydrology, University of Arizona, Tucson, AZ 85721.

INTERNATIONAL SYMPOSIUM: "MANAGEMENT OF HAZARDOUS CHEMICAL WASTE SITES"

The International Association of Engineering Geologists is sponsoring a symposium on "Management of Hazardous Chemical Waste Sites," October 9-10, 1985, in Winston-Salem, North Carolina. The symposium is in conjunction with the annual meeting of the Association of Engineering Geologists. For additional information contact:

1985 Annual Meeting
Association of Engineering Geologists
c/o Ebasco Services Incorporated
2211 W. Meadowview Road
Greensboro, N.C. 27407-3408

"MAN-INDUCED LAND SUBSIDENCE" PUBLISHED BY GSA

The Geological Society of America recently published its sixth volume in its Reviews in Engineering Geology series. The volume, "Man-Induced Land Subsidence," is dedicated to Joseph F. Poland. It was edited by Thomas L. Holzer. The volume, which is the product of a symposium in Atlanta that was jointly sponsored by the Engineering Geology and Hydrogeology Divisions, includes 9 papers on subsidence due to fluid withdrawal, drainage of organic soils, sinkhole collapse, solution mining, and underground coal mining. The volume is available for \$28 from the Publications Department of the Society.

DIVISION IS 1034 MEMBERS STRONG

As of January 31, 1985, the Hydrogeology Division had a total membership of 1034. Student membership totaled 217.

HYDROGEOLOGY DIVISION

1985 MANAGEMENT BOARD

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Met Schroeder

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