Dear Colleagues,

I want to open with a note of gratitude and appreciation. At the time of the 1990 Annual Meeting in Dallas I was a "guest" of the Iraqi government and Saddam Hussein in Kuwait. My wife Gerda and I were in Kuwait on August 2, 1990, and soon became hostages. Gerda returned to the U.S. on September 13, and I escaped during the time of the meeting, arriving back in the U.S. on October 31. Both of us are grateful that the nightmare of Kuwait is now over. We both appreciated the many calls and letters received on our return indicating that the prayers and thoughts of our many friends and colleagues in the Division and Society were with us during our enforced confinement in our apartment in Kuwait City. The life of a hydrogeologist has always offered excitement and adventure, but the kind we experienced could have been forgone.

I particularly want to express my appreciation to the Management Board of the Division, and especially to Joe Rosenshein, for accomplishing all of the responsibilities and duties normally required of the new chairman at and immediately after the Annual Meeting. Joe agreed to continue as chairman until I was again able to function effectively. We communicated during the transition period and agreed that I would assume all the powers and duties of chairman in late January. What this actually proves is that the Division, owing to the dedication and hard work of many people, has become a viable, smoothly functioning organization that no longer depends solely on any one person or small group of people to be efficient and effective. We have come a long way since about 25 of us organized in 1959 in Pittsburgh, were approved by GSA as a group in 1960 in Denver, and as a Division in 1964 in Miami Beach. Along these lines, it is gratifying to see that the "old boy network" that essentially ran the Division for many years out of necessity has now done its job and is turning the reins over to new blood. This is essential to the continuing growth of the science of hydrogeology and its place in GSA.

The plans for the annual meeting in San Diego are now firm and the program is in good shape. Ken Hollett and Frank Schwartz as Program and Assistant Chairmen, respectively, are to be congratulated on the outstanding program they have developed. The dual representation in the Divisional Joint Technical Program Committee allows continuity and clout at GSA program committee meetings because the current program chairman is better aware of GSA procedures and can more effectively see that the Division's objectives are met. The 1992 program for Cincinnati is being developed by Frank Schwartz and Scott Bair, and the 1993 program in Boston is also taking form.

The Short Course Committee chaired by Darrell Leap has already made suggestions for the 1992 annual meeting. The Publications Committee, chaired by Frank Schwartz, is conducting a survey of members' publishing needs and interests. Please refer to and complete the questionnaire found in this issue of The Hydrogeologist. The Hydrostratigraphic Unit Committee has completed its work; an explanatory article and Hydrostratigraphic Unit Code, approved by NACSN, should be published in the AAPG Bulletin this summer.

Having just attended the joint NE-SE GSA Sectional meeting in Baltimore, I was very encouraged to witness the strong hydrogeology portion of the program. Most of the hydrogeology sessions were standing room only, which suggests that in these times of tightened travel budgets, the Sectional meetings will assume a larger role in meeting the objectives of the Division. The Sectional Representatives will be strongly encouraged to serve on the program committees of the Sections in order that a strong hydrogeology program is always a part of these meetings. In addition, the Birdsall Lecturer will be encouraged to make a presentation at as many of these Sectional meetings as possible. Bob Farvolden did this in Baltimore and his presentation was one of the highlights of the meeting.

Shirley Dreiss has agreed to be the 1991-1992 Birdsall Lecturer. The Management Board is very pleased with this selection. The Birdsall fund, as well as all the other Division Award funds, has been turned over to the GSA Foundation for maintenance. This will increase potential donor activity, provide for greater earning power, and allow for wider promotional activity. Hydrogeology members are encouraged to contribute to our award funds. The Birdsall Lecture has required the lecturer's institutional support in the past and perhaps this requirement will be lessened.

Paul D. Seaber
1991 Chairman
Hydrogeology Division
The Hydrogeology Division is now the second largest in GSA, with 1,871 division affiliates as of December 31, 1990, out of a total membership of about 16,700, or 11% of the membership. The Division is being encouraged, indeed is obligated, to take a larger role in Society affairs. The Society has established a Long-Range Planning Committee to develop a strategic plan; our Division's representative is Al Freeze. Division input is being prepared and is due at GSA shortly. The Division's purpose as defined in the Bylaws "is to bring together scientists interested in hydrogeology to facilitate the presentation and discussion of their problems and ideas, to promote research and the publication of results on hydrologic studies, and to advise and assist the affiliates and committees of the Society in matters pertaining to hydrogeology." The purpose of the Society is to advance the science of geology, the scientific growth and development of its members, and the application of geology to the wise use of the earth. Jack Sharp is now the Council's liaison with the Division and Dave Stephenson is the liaison with the Engineering Geology Division. Both are past chairmen of the Hydrogeology Division. The management board has made recommendations to the Nominating Committee to provide for a Hydrogeology Division Councilor for the 1991 elections. Please support our candidate.

GSA has established a new Institute for Environmental Education. Fred Donath, the executive director, is working closely with both the Engineering Geology and Hydrology Divisions to carry out the tasks of the Institute. The place of environmental geology in the society will be a central topic for discussion this year within GSA and the Division. In the February 1991 newsletter of the Engineering Geology Division, its chairman, Perry Rahn, stated that 8.3% of GSA members identified themselves with environmental geology and about 7% identified themselves with engineering geology. He concluded that 2,555 of the 16,700 GSA members are interested in engineering or environmental geology and stated, "I think they should all be part of the Engineering Geology Division." I do not entirely share this viewpoint, although I think membership in the Engineering Geology Division is to be encouraged. Many Hydrogeology Division members are members of the Engineering Geology Division. Engineering Geology may recommend changing its name to the Engineering and Environmental Geology Division. Some people are advocating a separate Environmental Geology Division. Some are advocating an amalgamation of the Engineering Geology and Hydrogeology Divisions, forming an Environmental Division in GSA, which is almost analogous to having a Geology Division. I believe, as the DNAG Hydrogeology volume amply demonstrated, that hydrogeology has reached the status of a separate, distinctive, and scientifically valid branch of geology. The Management Board would appreciate the Divisions' members' views on the subject of environmental geology within the GSA.

The Society also has established a SAGE program (Science Awareness through Geoscience Education). The Division should become intimately involved with this effort. I believe that the best hydrogeologists are those with a strong geology background and education. There is a need for cooperation with AGU, AWWA, AGWSE, and others including the Engineering Geology Division as has existed in the past. Essentially we should seek cooperation and harmony—not conflict or turf battles. More on this and on the Long-Range Planning Committee's report in the fall issue of The Hydrogeologist and at San Diego.

I look forward to attending the San Diego meeting after being confined to a Chicago hospital during the 1989 Annual Meeting in St. Louis and in Kuwait during the 1990 Annual Meeting in Dallas. See you there — Inshallah!
Darryll Pederson announced the results of balloting for Division Officers:

Paul Seaber, Chairman
John A. Cherry, First Vice-Chairman
Frank Schwartz, Second Vice-Chairman
John Harsh, Secretary-Treasurer

Darryll Pederson then reported that a special situation exists because Paul Seaber is in Kuwait, and it is not known when he will be able to leave. The Management Board decided that Joe Rosenshein would continue as Chairman until Seaber is able to assume the position.

Joe Rosenshein announced that Alan Dutton has volunteered to edit The Hydrogeologist for the coming year, and Rosenshein expressed his appreciation of a job well done to outgoing editor Bill Wilson.

Chairman Rosenshein asked for volunteers to establish a committee on short courses and for other committees as openings occur.

Alan Dutton, 1990 Technical Program Chairman, reported that 3 open sessions, 2 theme sessions, 3 field trips, 2 short courses and a full-day symposium make up the 1990 Annual Meeting Hydrogeology Program. Two post-meeting field trips were scheduled.

Ken Hollett reported on plans for the 1991 Annual Meeting in San Diego. Themes will follow those for this year. Several field trips are being planned, including 3 premeeting and one postmeeting. He suggested several themes, including: geophysical exploration for groundwater in arid and semiarid regions; depositional cycles in development of aquifers; hazardous waste site characterization, practical monitoring and case studies; groundwater, wetlands and riparian habitats; and multivariate geostatistical methods in geosciences. John Moore stated his willingness to present his short course on planning and writing geological reports. A request was made for a repetition of the monitoring short course and for a third course on use of groundwater flow models.

Joe Rosenshein noted that there is a very short deadline of December 1 for short course proposals and requested that a copy of proposals be sent to the Management Board and the Technical Program Chairman.

Frank Schwartz, Chairman of the Publications Committee, discussed the role of the Hydrogeology Division in the publication area. He linked the growth and future of the Division in GSA to publications and pointed out that other societies with publications are growing much faster. He recommended that the membership be polled to decide that, if they are interested in a new publication, contact be made with other Divisions in GSA and if a mandate is given to proceed, to request GSA to appoint a Blue Ribbon Committee to define the role of the Divisions in publications. An extended discussion followed about possible types of publications and need. A motion was offered and approved to provide funds for the mailing of a journal questionnaire and follow-up in the newsletter.

Darryll Pederson reported on student research award selection. The Management Board met with June Forstrom of the GSA. An attempt will be made to get a person on the GSA Review Committee and have a proposal sent to the Management Board.

Darryll Pederson reported that the Division will award $50.00 scholarships to the first two students who register for short courses at the Dallas Meeting.

Keros Cartwright inquired as to the status of the Hydrostratigraphic Committee and its recommendations. He will attend the Stratigraphic Commission Meeting on Wednesday and report back to the Management Board on the status of the proposed nomenclature.

Joe Rosenshein declared the meeting adjourned.

$50 Scholarship Awards to Early-Registering Students

Cash rebates of $50.00 were awarded to the first two students, members of the Hydrogeology Division, who registered for short courses sponsored by the Division at the 1990 Annual Meeting: Marsha Jones of the University of Alabama at Birmingham and Richard Sams of Eastern Tennessee State University. Marsha’s registration for Contaminant Hydrogeology was received September 21 and Richard’s registration for Practical Tracing of Groundwaters with Emphasis on Karst Terranes was received September 26.

Hydrogeology Program
1991 GSA Annual Meeting, San Diego
October 17–26, 1991

A broad cross section of field trips, short courses, and technical sessions, combined with a great location and facilities may prove to be the right combination to produce a large attendance and a good response from Division members. The Division program fits well with the meeting theme, “Global Perspectives,” and includes the following activities:

Field Trips
- Rocks, water, and politics: Groundwater basins along the Eastern Sierra Nevada — This is a 3-day field trip that will start in Reno, Nevada (prior to the technical sessions), include a visit to the Mono Basin and Long and Owens Valleys, and end up in San Diego on Sunday, October 20. The trip is organized by Wesley R. Danskan and Christopher D. Farrar, U.S. Geological Survey, and Shirley J. Dreiss, University of California.
- A hydrogeologic overview of the regional groundwater flow system in relation to Yucca Mountain, Nevada — The field trip will focus on the hydrogeology of the Ash Meadows and Alkali Flat-Furnace Creek groundwater subbasins that compose the major part of the flow system to Yucca Mountain. The trip starts on Thursday, October 24, and ends on Saturday, October 26. The organizers are Devin L. Galloway, Elisabeth Ervin, Michael Chornack, and Alan Riggs, all of the U.S. Geological Survey.

Short Courses
- Concepts and strategy for practical three-dimensional contaminant transport modeling — This 2½-day class is
designated to familiarize the participant with fundamental concepts and mathematical methods, develop the ability to formulate effective modeling strategies, and teach the use of contaminant transport modeling applications. The course will be taught by Chunming Zheng, Gordon Bennett, and Charles Andrews, all from S. S. Papadopulos and Associates.

- Contaminant hydrogeology: Practical monitoring, protection, and cleanup — This popular 2-day course is again offered by Christopher Palmer and Jeffrey Peterson of GeoStrategies, Inc.

Symposium

- Depositional environments and the development of aquifers — This symposium will focus on the evolution of aquifers in relation to the cyclic processes that control depositional sequences. Conveners are Mark Evans, Emory University, and Robert Laney, U.S. Geological Survey.

Theme Sessions

- Characterization and monitoring of groundwater contamination at hazardous waste sites: Research and case histories — Convener is Claudia Stone, S. S. Papadopulos and Associates.

Discipline Sessions

- Hydrogeology I and II and Hydrogeology Poster Session — Session chairs to be announced.

The field trips, short courses, and technical sessions are tentatively scheduled to cover the entire period from October 17 through 26, with the exception of Tuesday, October 22. No Division technical sessions have been scheduled for Tuesday in order to accommodate the Division Management Board meeting, Birdsall Lecture, awardees reception and Division luncheon, awards, and business meeting.

Be on the lookout for the Society’s call for papers and schedule of activities for the annual meeting. The announcement should be out this spring. Questions concerning the 1991 program can be directed to the Division Program Chair, Ken Hollette, U.S. Geological Survey, 433 National Center, Reston, VA 22092. For information concerning the 1992 Hydrogeology Program, contact either of the Program Co-Chairs, Frank Schwartz or Scott Bair, The Ohio State University. See you in San Diego.

Hydrogeopinion

Who’s in Charge Here?
by M. D. Mifflin

Never before have hydrogeologists been so numerous or well fed. We must be doing something right—right? Well, maybe so, but I feel there is another side of the story, and it’s time for the Hydrogeology Division of the Geological Society of America to begin to establish the leadership so necessary in an applied science such as ours. This will be the thrust of this opinion.

Geologists in general, including hydrogeologists, like to think they are working within the mainstream of societal needs: mineral resources, energy resources, and water resources. The expertise of hydrogeologists, in particular, has become so pivotal to problems related to hazardous wastes and water supply that our numbers have multiplied beyond wildest expectations. Nevertheless, regardless of our greatly expanded numbers, I’m not convinced we are collectively providing both the expertise and leadership that is necessary to resolve existing hazardous waste problems and prevent future problems. I still recall my own professional soul-searching in the early 1960’s as I became aware of what passed for standard professional behavior in water-related activities. It’s not that the water profession did not know what was going on in the name of development; we had basically been “bought off” in many ways. Individual consultants made good livings advising industry as to how to develop groundwater, but rarely gave advice on waste disposal that was clearly hazardous to surface or groundwater resources. Several federal agencies greatly expanded their organizations through water-resource development programs and policies that were environmentally destructive. Most, if not all, of the hydrogeologists involved recognized the environmental tradeoffs that were being made daily, and the profession as a body had developed the tradition of looking the other way. It took the protest generation of the 60’s to lift environmental concerns to a respectable level in professional water work.

Twenty-five or so years later we may still be out of control with respect to groundwater management. Many other professions have jumped on the hazardous waste bandwagon, and the hydrogeologists have basically failed to provide the leadership necessary for wise (read cost effective) management of the groundwater resources. It seems to me that both individually and collectively we are mute about the multitude of idealistic regulations that sound good to the lay person, the agency employee with limited training in groundwater, and the lawyer, but that are too frequently totally beyond what is technically and/or scientifically defendable. I believe the Hydrogeology Division of CSA is the professional body that indeed has the human resources with the expertise to help put groundwater management back on a sound technical and scientific basis.

Allow me to shift from the general to a specific problem area: high-level radioactive waste disposal. To date, 40 years of efforts on high-level radioactive waste disposal have not produced any acceptable repository site nor any consensus on a permanent repository. This would not be particularly newsworthy but for the rising cost of the last 9 years of effort to dispose of the waste—over $2.6 billion. I can’t help but think $2.6 billion should be adequate to resolve any hydrogeologic problem. Not so! We are no closer to a permanent high-level nuclear waste repository that meets licensing requirements than when I first became involved about 10 years ago. I think it may be time to ask the question —why? I can assure you, it should not require the $1 billion already spent on the Yucca Mountain Site to determine whether it meets the permanent geologic repository requirements.

Several factors contribute to both cost and lack of progress. First, part of the problem is the management style used by the Department of Energy (DOE), the federal agency charged with selecting, constructing, and operating the high-level nuclear waste repositories in the Nuclear Waste Policy Act of 1982. Much of DOE’S national program is structured and styled to manage information for secret programs, and this “style” has
carried over into the high-level repository program. This is not
the best way to develop and manage a demanding site selection/
characterization effort where both scientific overview and public
interest are integral to the program. Second, the agency was
biased toward several DOE facilities for which it already
controlled land and access. Of course, these DOE sites had
favorable hydrogeologic environments? In addition, heavy
political pressure and congressional action helped DOE in nar-
rowing down the sites to the one at Yucca Mountain. The Nuclear
Regulatory Commission, charged with licensing the high-level
nuclear waste repository, has prolonged the repository selection
process by purposely giving vague or poorly focused feedback
to DOE on key site licensing issues, and by allowing DOE to
push candidate sites forward in the selection process when
several should have been eliminated on the basis of the site
selection criteria and available data. All of the above and many
other factors have contributed to the very high cost of the
program to date, but not to the overall failure of the program in
terms of progress. They are more like symptoms than the basic
problem, in my view.

No—I believe the fundamental reason the high-level nuclear
waste disposal program displays little or no progress is because
of us—the hydrogeologists. Like Pogo's long-ago comment on
environmental problems, "... we have met the enemy, and he
is us," we have not been doing our job at the collective leadership
level (even though there are perhaps hundreds of us that have
worked on the high-level nuclear waste disposal program).

Let me pose a question to the membership of the Hydro-
geology Division in an attempt to illustrate what I perceive to
be the root problem: What specific hydrogeologic environment
would make a repository for permanent isolation of high-level
nuclear waste? Keep in mind that the current national policy is
to emplace the waste into a geologic repository with hydro-
geologic properties that are capable of isolating the waste for
at least 10,000 years. A large amount of the radioactivity persists
well beyond this time scale. Without my going into a multitude
of additional constraints, the numerous species of long-lived
and rather mobile radionuclides in aqueous systems should
suggest to most hydrogeologists that geologic isolation would
require extremely low permeability environments. In addition,
because of the need for essentially "perfect" waste isolation from
migrating fluids, one would prefer to be confident about the
distribution and character of local pathways such as fractures,
which may allow for groundwater migration.

My answer to the question is that the following problems
combine to make it unlikely that the permanent geologic
repository as envisioned in the U.S. program can be realized:

I. large volumes of solid waste,
II. very long lived radioactivity,
III. radionuclides that are mobile in gaseous and aqueous
phases,
IV. spent fuel that generates a heavy heat load during the
first 100 years of its life, and
V. limited knowledge of low-permeability hydrogeologic
systems and of how to test or characterize them.

The above factors make me believe that we should be
working on the design of safe long-term storage (monitored
repositories with remote retrievability of the waste). However,
our collective silence and the aforementioned political and
institutional factors have narrowed the search process to Yucca
Mountain, where the proposed repository horizon is in highly
fractured welded tuffs above a deep regional water table. The
postulated waste-isolation attributes of the site are its arid climate
and vadose zone position—nonsense, considering the several
lines of evidence for fracture flow in the vadose zone. I conclude

GSA Bulletin Needs Articles in
Hydrogeology

by John M. (Jack) Sharp, Jr.

The Geological Society of America Bulletin seeks more papers
in hydrogeology. Of particular interest are those that relate
hydrogeology to other theoretical or applied geological processes
or where the geology serves as a controlling factor of the hydro-
geology. Papers published in the GSA Bulletin have a major impact
factor. At the recent meeting of the associate editors of the Bulletin
(Noel Krothe and I are the hydrogeologic associate editors), the
impact factors of major journals in geological sciences were listed.
These are the average number of citations of an article appear-
ing in a particular journal for 3 years following its publication.
Below I list the average citations of papers that appear in journals
of interest to hydrogeologists:

<table>
<thead>
<tr>
<th>Journal</th>
<th>Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature</td>
<td>13.8</td>
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<tr>
<td>Annual Reviews of Earth and Planetary Science</td>
<td>3.23</td>
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<tr>
<td>Geochimica et Cosmochimica Acta</td>
<td>2.88</td>
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<tr>
<td>Geology</td>
<td>2.52</td>
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<tr>
<td>Geological Society of America Bulletin</td>
<td>2.42</td>
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<tr>
<td>American Journal of Science</td>
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<tr>
<td>AAPG Bulletin</td>
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<td>Water Resources Research</td>
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<tr>
<td>Geophysics</td>
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<tr>
<td>Geotechnique</td>
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<tr>
<td>Ground Water</td>
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<tr>
<td>Journal of Hydrology</td>
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<tr>
<td>Journal of Hydraulic Division, ASCE</td>
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<tr>
<td>Water Resources Bulletin</td>
<td>0.52</td>
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<tr>
<td>Environmental Geology and Water Science</td>
<td>0.33</td>
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<tr>
<td>Hydrological Sciences Journal</td>
<td>0.27</td>
</tr>
<tr>
<td>Quarterly Journal of Engineering Geology</td>
<td>0.20</td>
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</tbody>
</table>

I want to bring these figures out because of the feeling that
some have expressed—that to publish a hydrogeological article
in the GSA Bulletin means that it will not receive attention. The
statistics seem to indicate otherwise.

We encourage submission of hydrogeological papers of a
broad interest to the earth sciences community to the GSA
Bulletin, regardless of what steps the Geological Society of
America may take to provide a venue for the applied earth
sciences. We cannot, of course, guarantee acceptance of any article
a priori. Note that GSA's rejection rate averaged about 50% for
the past 12 months, and that there is about a 6-month lead time
for publication after manuscript approval.
C. V. Theis Papers Donated to University of New Mexico

Contributed by Alfred Clebsch

The scientific and personal papers of the late C. V. Theis have been donated to the University of New Mexico by the U.S. Geological Survey and by Theis's daughter, Mrs. Marilyn Lewis. The collection will be housed in the Center for Southwest Research, formerly the Special Collections Department, of the UNM General Library. The University expressed a strong interest in the material because so much of it relates to the water resources of New Mexico and because of Theis's long association with the University as Research Associate, Adjunct Professor, and senior official of the Geological Survey, which was housed on the campus for many years.

The collection includes a large volume of technical notes, correspondence, and manuscripts resulting from more than 6 decades of active professional life. Notebooks and other papers should be of interest to researchers, both hydrogeologists and historians of the science, because of Theis's wide-ranging and long involvement in the earth sciences. Although he is known principally for his contributions to groundwater hydraulics, his publications include papers on evaporation, terrestrial heat flow, and other subjects.

C. V. Theis was a long-time Fellow of GSA, a charter member of the Hydrogeology Division, and its chairman in 1969.

Report from the Committee on Publications

In February 1990, the Hydrogeology Division formed an ad hoc committee on publications consisting of Frank Schwartz (Chairman), Bob Farvolden, and Warren Wood. The mandate of this committee (paraphrased from Joe Rosenshein) was to "do anything you want, but do something." The committee interpreted this charge as (1) to determine linkages between the opportunity to publish within GSA and the future of the Hydrogeology Division and (2) to come up with recommendations for projects we might undertake in the Division.

At a meeting in June 1990, the committee agreed that without viable publication outlets for the members one had to be concerned about the future of the GSA Hydrogeology Division. While it is difficult to rank the Hydrogeology Division in the pecking order of professional societies (for example, in terms of the number of members, interest/activity, and perceived prestige), we are at best a distant third behind NWWA and AGU (or worse, depending on what engineering groups are included). This assessment is not really news to our members.

C.V. Theis was a long-time Fellow of GSA, a charter member of the Hydrogeology Division, and its chairman in 1969.

Treasurer's Report

As of December 31, 1990, the Division had a balance of $6,782.78 in the treasury.

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<td>Dues income, 1990</td>
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<td>Grants, 1990</td>
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<td>Transfer to GSA Foundation</td>
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<td>Balance, 12/31/90</td>
<td>$23,392.00</td>
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Hydrogeology Division
1991 Management Board

Chairman
Paul Seaber, Winston-Salem, NC (Temporary)

First Vice Chairman
John Cherry, Waterloo, ON

Second Vice Chairman
Frank Schwartz, Powell, OH

Secretary-Treasurer
John Harsh, Exton, PA

Past Chairman
Joe Rosenshein, Reston, VA

* Joint Technical Program Committee
  Ken Hollet  Frank Schwartz
  Alan Dutton  E. Scott Bair

Division Liaison to Council
John M. Sharp, Jr., Austin, TX

1991 Committees
O. E. Meinzer Award Panel
Donald I. Siegel, Chairman
Isaac J. Winograd, Shirley J. Dreiss
Stanley N. Davis, Martin D. Mifflin

Birdsall Lecturer Committee
Warren Wood, Chairman
Leslie Smith, Coordinator
Robert Farvolden, Lecturer

Nominating Committee
John Hess, Chairman
Mary Jo Baedecker
William E. Wilson

Distinguished Service Award Committee
Gerald Meyer, Chairman
P. A. Domenico, William Back

Short Course Committee
Darrell Leap, Chairman
Ken Hollett
Bridget Scanlon
John M. Moore
John Cherry, Program Chairman

Fund Raising Committee
Philip LaMoreaux, Chairman

Publications Committee
Frank Schwartz, Chairman
Warren Wood
Robert Farvolden

Representatives to Other Societies
Joe Weihaupt, American Association for the Advancement of Science, Section W

John M. Sharp, Jr., U.S. Committee for the International Association of Hydrogeologists

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Shirley Dreiss Selected as 1991-1992 Birdsall Lecturer

Shirley Dreiss, Professor at the University of California–Santa Cruz, has been selected as the 14th John Birdsall Distinguished Lecturer. Among several topics that Shirley is considering for talks is flow in deforming media; talk titles and abstracts will be given in the fall issue of *The Hydrogeologist*. To schedule a visit during Shirley's tour beginning next fall, please call Shirley (408-459-2225) at the Department of Earth Sciences, University of California–Santa Cruz, Santa Cruz, CA 95064.
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